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APRIL 26, 1947

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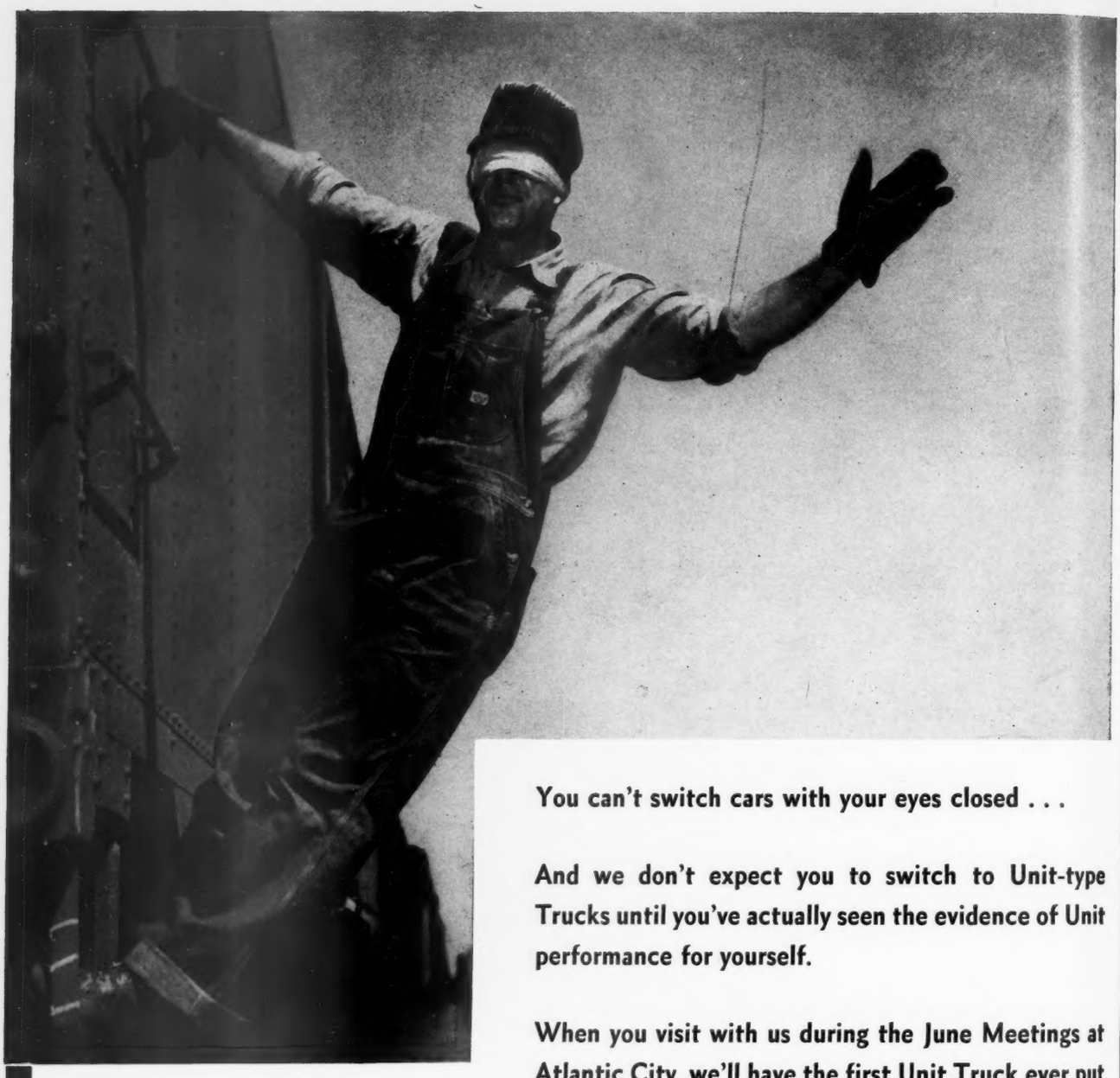

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RAILWAY AGE

Who Holds the "Initiative" in Transportation?

On the evening of May 17 the New York Railroad Club had one of its most successful meetings in a long time—judging both by the size of the attendance and its representative character, including not only the local railroads, but many of those in distant parts of the country. The occasion, as readers of last week's *Railway Age* know, was a presentation of technological innovations which hold out hope both of improving the quality of dining car service and reducing its cost. Those who so often complain that the railroads are not awake to the possibilities for technological and service improvements will find it a little hard to explain away the interest which led some railroad men to travel more than 2,000 miles to attend such a meeting as this one.

Would it not, though, be more accurate and also more constructive—alike for those given to criticizing the railroads and those who just as quickly spring to their defense—to recognize that there are some aspects of railroading where there is an eager and constant search for better ways of doing things; while in other phases of the business innovation, if not downright unwelcome, is sought after with a zeal which is more sedate than fiery? The railroads can be thankful for their technological progress—and to the manufacturers no less than to the railroad men who have pioneered it. Without such improvements, the industry would have been powerless to meet, so far with a large measure of success, its problems of mounting labor costs and increased rivalry from government-owned transportation plant.

Progress Out of Balance

Must it not be conceded, however, (1) that some phases of railroad technology have advanced more rapidly than others; and (2) that the industry has had more success with its technological improvement than in the solution of its economic, labor, marketing, and legislative difficulties? It is coming to be a familiar saying that science has outgrown sense. There are people in another hemisphere who are at a stage even below illiteracy in morals and economics who, nevertheless, aspire to the scientific and industrial erudition which will enable them to manufacture atom bombs. The director of the Rockefeller Foundation, Raymond B. Fosdick, writing last November in the New York Times Magazine, said: "There is a lack of balance about our studies and our research which cries for correction. . . . The disproportion between the physical power at our disposal and our capacity to make good use of it is growing with every day that passes." The correction of this condition obviously does not lie in discontinuing technological advancement, but in striving to bring economic and social progress up to a par with that of technology.

Disadvantages of the Defensive

This observation is plainly applicable to the railroads. In the development and improvement of motive power, in signaling and communications, in roadway and structures—and in most if not all other technological branches of railroading—railroad managements possess the *initiative*. That is, they do not wait for something untoward to happen and then try to find an expedient to minimize the unfavorable results. What, however, is the position of management—of the railroads as well as of other large industry—in dealing with labor? Is it not a fact that, in that realm, practically all the innovating is done by the unions—that is, has not the *initiative* in labor relations passed largely from management to the labor organizations?

The word *initiative* is here used in its military sense—meaning that the possessor is, at least temporarily, the more powerful contestant; the one who determines where, when, and with what weapons battles are to be fought. All the combatant who does not have the initiative can do is to make shift to defend himself as best he can, at such places and times as his more fortunate opponent may choose to attack him. The passing of the initiative from Hitler and the Japs to the allied forces marked the turning point in the recent war. In the diplomatic conflict which arose immediately the war ended, this country, by its precipitate withdrawal of troops from Europe, quickly sacrificed the initiative to Soviet Russia. James Burnham points this out in his noteworthy recent book, "The Struggle for the World," which shows how this powerful nation has dur-

ing the past two years accomplished practically nothing against Red aggression but partial and retreating defense here and there.

Such books as Burnham's make profitable reading for leaders of industry and transportation, aside from the importance of their direct message, because the principles expounded in these books are just as applicable to the management of a business as they are to the management of a nation. Much the same qualities of managerial skill which are needed to direct successfully the affairs of a state are equally essential in conducting a large business—and the errors and oversights which can wreck a country can also ruin an industry. Of such errors none is more fatal than the prolonged loss of initiative in too many directions.

Another book which, while its direct purpose is to tell the history of civilizations, affords a valuable by-product in revealing some of the qualities necessary for the continued successful management of any institution, is A. J. Toynbee's "A Study of History." The author brings out that an institution progresses so long as the minority which controls it continues to be "creative"—that is, keeps on evolving new means of advancement. Progress stops and disintegration begins when the minority in control ceases to be creative and becomes merely "dominant"—that is, tries to hold on to its leadership and power without doing anything noteworthy to deserve such preferment.

The management of industry, including transportation, in this country has certainly retained its "creative" status and also the "initiative" in the realm of technology. It has lost the initiative, but perhaps only temporarily, in its dealing with labor. More serious, in transportation, has been the apparent absence of the initiative in the hands of *anyone* with a sense of responsibility when it comes to dealing with the problem of the rivalry between government-owned and private plant. The defenders of capitalism either do not have the power or lack the determination to seize the offensive with the necessary vigor; and the partisans of socialism are either lacking in zeal for a show-down contest or believe that they will win by default in the long run and see no reason to exert themselves for a pitched battle which, conceivably, they might lose.

Such matters as these are not "theoretical" abstractions, of little or no concern to those charged with the practical administration of the railroads. On the contrary, they are the most practical business with which management can concern itself. When railway officers and supervisors will flock to some central point to pick up a new wrinkle in promoting harmonious relations with employees, or in the more effective interpretation to the public of the economics of transportation competition—as they went to New York last week to find out about some promising improvements in dining car equipment—then the *initiative* in the management of the railroad business will be in the hands of a "minority" whose "creativeness" no one will question. In such hands, the younger men in the business need have no misgivings lest in a dozen years or so they may have politicians for their superiors. The business of management is to manage, i.e., to obtain and retain the *initiative*—not only in the realms of technology, accounting and finance—but also in those of economic, social, labor and public relations.

Grading Costs and Line-Improvement Work

In a recent survey of the nature and extent of the railroads' improvement budgets for the year, one-third of the companies submitting information said their programs included projects involving grade and line-revision work. The objectives of these undertakings are, of course, to produce operating economies or to permit higher train speeds, or both—objectives desirable to help meet competition and the higher costs of doing business. It is fortunate, therefore, that there has occurred a development making possible line-improvement work which otherwise might be entirely out of the question. This development is the revolution in grading equipment, resulting in greatly-reduced grading costs.

In the past the achievement of favorable grades and alinement in rugged territory was frequently prevented because the means at hand for doing the large amount of grading involved were such that the costs would have been exorbitant. Almost every road has plans reposing in its files for desirable line-improvement projects that never got past the planning stage because of the high cost of grading.

The evolution in grading equipment has produced fundamental changes in this picture. With the mechanized excavating and hauling equipment available today, vast yardages of material can be moved at only a few cents a yard. As a result, the cost of many line and grade-change projects formerly considered entirely out

Unfinished Work

America was built on one basic idea, that every person is the master of his own destiny. Our system of personal freedom allows each individual to do his best. The American system is not perfect, but it is vastly better than any foreign system with the state as master. Our system is being improved and will continue to be improved, but we must be extremely careful not to destroy its foundation, that which has made America great — our system of free enterprise. . . .

Our country will never be communized unless its people wish to be communized. If we desire to retain our freedom, it behooves each and every one of us to have faith in ourselves and in our own country, and to reaffirm our belief that in our way of life we have the best that civilization yet has had to offer.

It will always be our unfinished work to preserve the liberty, freedom and prosperity of America. In reality this a normal problem and its solution lies in the hearts of men.

We are all of us, in our many different ways, seeking to preserve America, and yet how easy it is to forget the responsibilities of Democracy as well as its inherent rights. Democracy does not mean the doing of what we as individuals may choose, but the acceptance of the responsibility to choose what is right.

—Paul H. Van Hoven, president of the Duluth, Missabe & Iron Range.

of the question has been reduced to a point where the work is now economically feasible.

A concrete example of this is afforded by the recent experience of one large road. Authorization was obtained to undertake an important grade-reduction project, and estimates were made on the basis of the latest information available. When bids were received it was found that one contractor was prepared to do the grading work at a unit cost one-third less than the figure on which the estimate was based. It developed that this bid was predicated on the use of a new grading machine just being introduced. Immediate and effective use was made by the railroad of the saving realized by employing the difference between the original appropriation and the actual cost to enlarge the scope of the same undertaking.

Doubtless at least some of the line-improvement projects now under way or contemplated consist of jobs which, first considered years ago and shelved, have now been brought within reach by the reduced grading costs. Perhaps these lower costs may even make it possible to consider applying corrective measures at locations where, because of topographical conditions, the necessity for the continuance of unfavorable grades and curves has heretofore been taken for granted.

Do Fuel Statistics Conceal the Facts?

Some people in the railroad business have a feeling that the accepted statistical indicator of the efficiency of locomotive fuel consumption does not always tell the whole story and that, while the figure "equated pounds of coal per thousand gross ton-miles" has been used as a basis of comparison between divisions of the same road and between one road and another, it leaves a lot to be desired in the matter of accuracy of comparison.

The only reason for making comparisons of fuel performance is because fuel for locomotives represents such a tremendous expenditure and is such a large part of the cost of locomotive operation. Special effort is made by every railroad to reduce the unit consumption of fuel and to record that performance in such a manner that trends can be studied in relation to changes made in the manner of using locomotive fuel.

Many factors influence fuel performance: quality of fuel, character of profile over which trains must operate, type and condition of motive power, skill of enginemen in handling trains, volume of traffic, and other minor factors. An examination of fuel records will indicate that a road with a good quality of locomotive fuel and a high traffic volume will invariably show a comparatively good fuel performance figure, and that, if the road happens to be one operating in the colder climates of the northern states, its fuel performance sometimes suffers in the mid-winter months. This is not at all surprising.

The introduction of the Diesel-electric locomotive has been accompanied by the exploitation of fuel economy as one of its major advantages. It would not be unreasonable to expect that on any given railroad, as more and more of its freight traffic is handled by Diesel power instead of steam power, the statistical indicator of the efficiency of fuel use should show a decided turn for the better. Unfortunately, not very many railroads have as yet installed a sufficient number of Diesel units in freight service to have a decided effect on the fuel performance figures, but there are a few roads on which the proportion in freight traffic, on certain divisions at least, is growing at a substantial rate. It is to these roads that we look to find evidence in the statistics of the influence of the known economy of the Diesel.

As an example, there is a road which is now approaching 10 million locomotive-miles of freight-service operation with Diesels; the major part of this locomotive-mileage has been made in the 24 months of 1945 and 1946, statistics for which are available. At the beginning of 1945 less than a third of all the freight traffic on that road was handled by Diesel and at the end of 1946 approximately 80 per cent of its freight traffic was Diesel hauled. During the entire year 1945 the road's total freight operations involved about 10 billion gross ton-miles and required about 4.3 million road locomotive-miles to handle it. During the 24 months more and more Diesel mileage was added and steam mileage was reduced in proportion. For the 12-month period of 1946 both the gross ton-miles and the locomotive-miles decreased 11.5 per cent, but better than half of the nearly nine billion gross ton-miles of that year were Diesel-hauled. We expected to see a decided improvement in fuel performance when we tabulated the statistics for this operation but were surprised to find that the average *equated* pounds of coal per 1,000 gross ton-miles was 107 in 1945 and 106 in 1946—this in spite of the fact that this road actually saved almost two million dollars in the year 1946 in fuel cost as a result of Diesel operation. What, in this case, did the so-called fuel equation do but conceal the creditable showing in fuel economy on this road?

We take this occasion again to question the value and accuracy of the equated fuel figures. What will happen when this road goes 100 per cent Diesel? Will it still be required to convert all the oil data to coal and, if so, what will the fuel performance statistics mean?

A "Delusion of Security"

In our own time the mainspring of western civilization, its affirmation of individual liberty, has been destroyed in some countries, damaged or deranged in others. The equality of man began perhaps to diminish the quality of man. There has been a widespread tendency to exalt security at the expense of liberty without any consideration of the overwhelming evidence that no real security exists for the individual when his life and liberty are at the mercy of an all-powerful state.

Losing confidence simultaneously in his capacity for individual initiative and self-reliance and in his right and duty to form and act on individual moral judgments, man too often began to look toward an impersonal state for a delusion of security. . . . If western civilization is not to go into a declining tailspin it must find its old source of strength in a rediscovery of . . . man's faith in himself.

—William Henry Chamberlin in the Wall Street Journal.

Tackle $100,000,000 Claims Account

Accent placed on loss and damage preventive methods as freight claim men meet in annual session at St. Louis

THE problem of arresting the extraordinary increase in the amount of the freight loss and damage bill of the railroads in the past few years dominated the deliberations of the 350 claims and prevention men attending the 56th annual meeting of the Freight Claim division of the Association of American Railroads, held in St. Louis, Mo., April 15 to 17. The meeting attracted particular interest because of the necessity of making up for the lack of meetings in 1945, due to the war, and in 1946, due to "coal and railroad strike conditions," respectively. By invitation of the St. Louis traffic club, the members of the division joined in a "Perfect Shipping Month" luncheon at the Hotel Jefferson, at which C. E. Johnston, chairman of the Western Association of Railway Executives, discussed the necessity for reducing the loss and damage bill in particular, and, in general, the dangers which beset the American private enterprise system.

Outstanding items on the agenda of the annual meeting included the full "recipe" for a campaign for attacking the damage and loss problem at the roots, developed by the National Committee on Prevention of Loss and Damage. An address by Col. E. C. R. Lasher, chief of the traffic and movements division of the Office of Chief of Transportation, War Department, Washington, D. C. emphasized the importance of having freight arrive at destination on time and *free from damage,* which—highly desirable during peace-time—was vitally important during the war. Chairman J. J. McManus, freight claim agent of the Northern Pacific, who presided over the three-day meeting, reviewed briefly the upsurge of claims' costs, which rose from $59,760,000 in 1943 to $94,300,672 in 1946. J. H. Aydelotte, recently-elected vice president, Operations and Maintenance Department, A. A. R., ascribed much damage to the car shortage, with special emphasis on heavier loading and the use of improper equipment.

The railroads must chart a prevention program which will not only check the upward sweep of the loss and damage curve, but start it on the way down to normalcy, according to Chairman McManus. Steps in this direction already taken by the railroads include the establishment of roving inspectors by the weighing and inspection bureaus the appointment of packaging engineers by certain roads; the short course in transportation losses given to 47 railroad officers under A.A.R., sponsorship at Purdue University (reported in *Railway Age* for February 22, 1947, page 418); the analysis of switching operations by experienced yardmasters; and the revival of "rough handling committees" by the Southeastern carriers.

Claims and Public Relations

Noting a substantial rise in the number of claims filed, the division's chairman emphasized the important public relations aspect in "prompt and courteous handling of such claims." Perishables—which accounted for 25 per cent of the total claims bill in 1945—must be accorded particular attention, said Mr. McManus. In this connection, quick frozen food products will require an entirely new approach and may require new and specialized equipment for its handling. The speaker went on to recall that between $20,000,000 and $25,000,000 of claims on perishables accumulated during the war were settled by negotiated uniform claim adjustments. A group of roads made similar arrangements for settlement of livestock claims.

Prevention Everybody's Job

Colonel Lasher credited the railroads for their part in the "definite success of the greatest of all transportation enterprises just passed," but warned that they cannot exist any longer on that record. With a return to peacetime standards there is more than ever a "necessity for getting shipments from point of origin to point of destination intact." Referring to special containers which the War Department had engineered and actually floated into their destinations, or stored in two or three feet of mud, the speaker intimated that there was much room for improvement in packaging goods for domestic shipment.

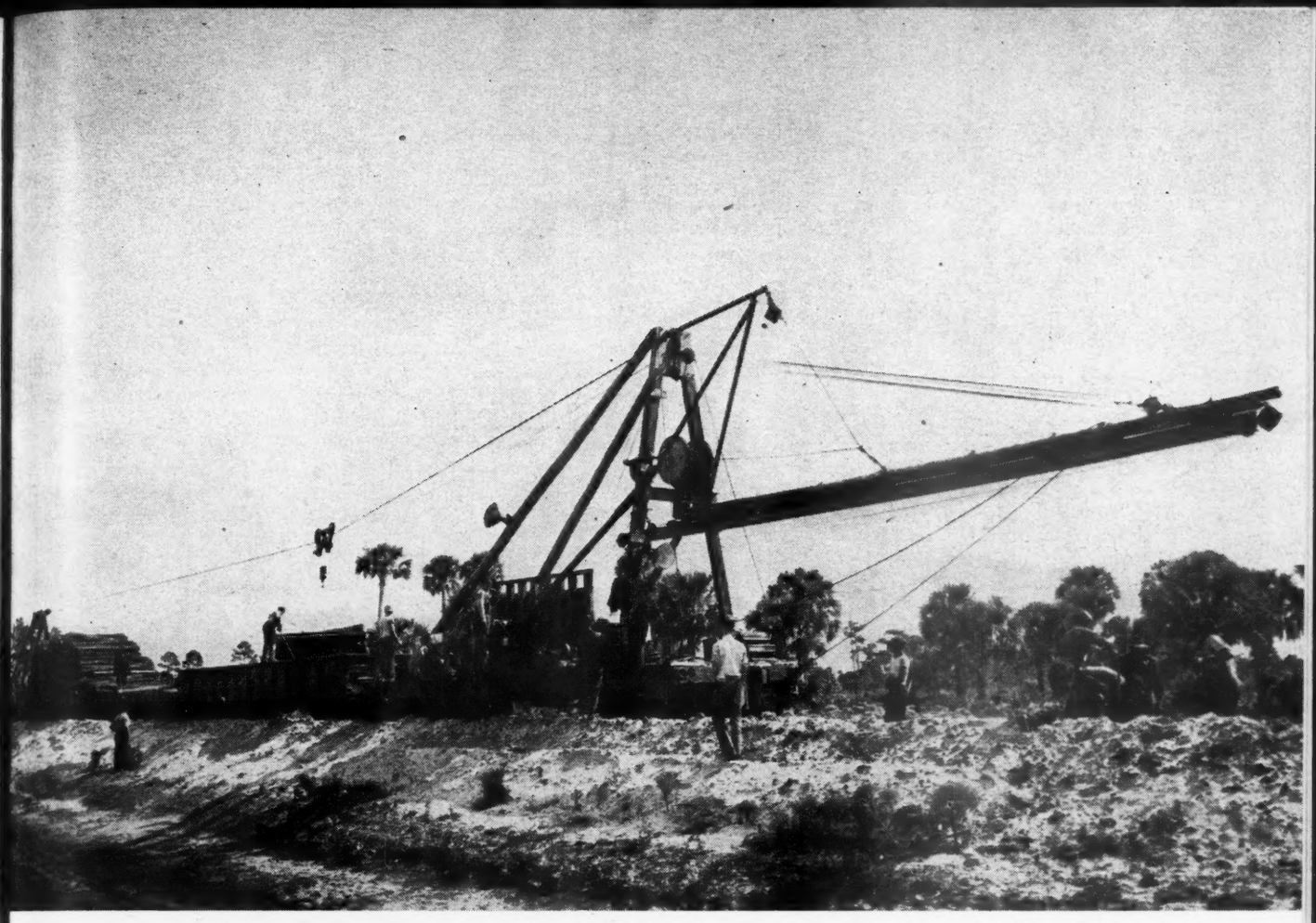
Prevention of loss and damage is not alone the job of the claim prevention officers but also of all who have a hand in the transportation of the shipment, he stated. "We learned by experience that damage to merchandise in transit in normal times, while serious, is definitely an economical loss, but loss and damage to material in war-time was tragic because its needs far surpassed its value; therefore, it not only represented loss of value, but loss of irreplaceable materiel and manpower efforts and in many cases it meant the possible loss of life. It has been a lesson that merits the most serious prevention analysis of causes and corrective application."

Citing loss and damage as an important phase of the expense factors which are in control of railroad management—as distinct from political and other factors outside their sphere of influence—Mr. Johnston declared that payments made for damaged shipments are just as much a direct element of expense as employees' wages and the cost of fuel. Citing the unprecedented rise in the cost of freight loss and damage—it was almost $100,000,000 in 1946, about the cost of building and equipping 1,000 miles of main line railroad—the speaker observed that freight loss and damage constitutes a cost from which no one gains benefit; it is "sheer waste." The fact that the loss and damage total in 1946 was four times that of prewar years cannot be attributed wholly to increased traffic or the increased replacement value of the items. There exists the necessity for closer attention to the details of the problem. "All of our people in every walk of life must be made to understand that waste and extravagance will ruin any person, any people, any business or any nation."

Mr. Johnston devoted the remainder of his address to an analysis of the threat of socialization, with particular emphasis on the nationalization of basic industries now proceeding in Great Britain. Considerable "nationalization" has already been attained in the United States, according to the speaker, pointing to government competition with private business in such diverse fields as transportation, housing, banking, power production and insurance. The threat of socialization of the railroads is stronger than is commonly believed, he asserted, and, if accomplished, would constitute the action by which the "camel thrusts his head into the tent."

"The most severe problem confronting railroad management today is that of insufficient net income," Mr. Johnston

(Continued on page 859)



Ties and rails for the track of the new cut-off were handled from cars with this specially-designed track-laying machine

F. E. C. Builds New Cut-Off

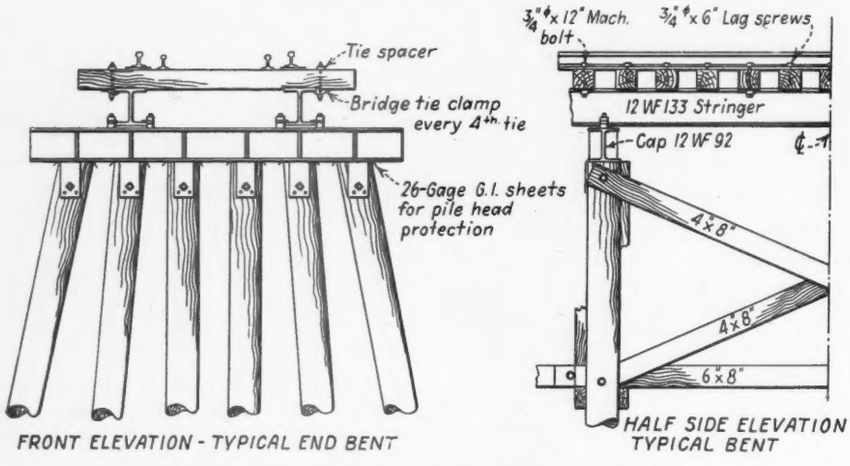
Recently-constructed line will simplify operations and permit the abandonment of 134 mi. of a branch that has become unprofitable

ON April 1, the Florida East Coast inaugurated train operation on a new cut-off, 29.3 mi. in length, which will permit the eventual abandonment of 136 mi. of its Okeechobee branch. This branch parallels the main line, some miles to the west, for its entire length and, because the timber in the area has largely been cut away, little traffic has originated on its northern section during the past decade. The southern 44 mi. of the branch, however, which will continue to be operated as an extension of the new cut-off, traverses productive territory, which, since the building of the railway, has developed into an important vegetable-growing and sugar-producing area.

The building of the Okeechobee branch in the first place was inspired by the Florida East Coast's policy of providing adequate transportation into areas in Florida capable of development with such transportation. Maytown, the original northern terminus of the branch, is situated at the crossing of two branch lines which are now used as an alternate main line between Titusville and New Smyrna, but at the time of the construction of the branch it was simply a turpentine camp on a branch line extending north and west between Titusville and Benson Junction, 40 mi. This branch ran northward, parallel to the main line, from Titusville to Maytown, 16.8 mi., before veering to the west. The original plan was to build a line south from Maytown to Kenansville, 73 mi., to tap a virgin timber area. Soon thereafter, however, it was decided to extend the line southward from Kenansville for 49 mi., to serve additional timber-producing and cattle-raising areas and to supply rail transportation to and from Lake Okeechobee, where a commercial fishing industry was being started. Train service was inaugurated on both sections of the 122-mi. line simultaneously, on January 4, 1915, the southern terminus being at what is now the town of Okeechobee, which then consisted of one ranch house, a store, in which the postoffice was operated, and the buildings of the railway, though construction of a number of buildings was under way.

With the beginning of service on the branch, trains were operated northwest from Titusville on the main line to Maytown, thence southwest and south over the branch. This was a somewhat roundabout operation for through traffic, requiring a movement of 47 mi. between New Smyrna and Maytown, whereas a line between those two points would reduce the distance to 17 mi. and would

transfer the terminal for the Okeechobee branch to New Smyrna, a division point. By forming the third side of a triangle, of which the other two sides were that part of the main line between New Smyrna and Titusville and that part of the branch between Titusville and Maytown, such a line would afford an alternate route between New Smyrna and Titusville. Therefore, the 17 mi. Maytown-New Mmyrna cut-off was constructed in 1916 and service inaugurated on November 15, 1916, thus giving the F. E. C. two lines between Titusville and New Smyrna—the original main line, 28.8 mi., and the line via Maytown, a few miles longer, or, in effect, double track between these two points. At the same time, the terminal for the Okeechobee branch trains was moved from Titusville to New Smyrna.



Drawing showing the use of wide-flange beam for caps and stringers in the open-deck trestles built on the cut-off

Developing a Fertile Area

During the period of construction of the line to the northern shore of Lake Okeechobee, a struggling agricultural development was begun along the southeastern shores of the lake and on some of its islands. The vegetables produced were shipped by barge through drainage canals to Fort Lauderdale on the main line of the F. E. C., where the railway built a wharf to accommodate the transfer of such traffic to railway cars. However, water transportation of perishables was found to be slow and unsatisfactory and several years after completion of the line to Okeechobee the F. E. C. extended its branch along the eastern and southern shores of the lake to give the area rail transportation. Train service was begun on October 19, 1925, on a 34.3-mi. extension to Canal Point. A further extension to Belle Glade, 11 mi., was placed in service on March 10, 1927. Meanwhile, an infant sugar industry was developing along the southern shore of the lake and a still further extension to Lake Harbor, 9.4 mi., was placed in operation on November 20, 1929.

This final extension supplies a connection at Lake Harbor with the Atlantic Coast Line, which built into the area from the west at the same time. It also includes a number of cane spurs. The sugar industry has flourished in the area and, during the cutting season, the F. E. C. operates a number of cane trains on these spurs, using the sugar company's special cane cars, but supplying the motive power and the crews for hauling the cane from the fields to the sugar mill.

Despite the richness of this area, neither the federal government nor the state of Florida constructed highways to it, or improved its waterways, until after the railway had been built and had attracted a large number of settlers into the area.

During the producing and shipping season of 1945-1946 the traffic originating in the territory and destined for the eastern and northern markets included 12,314 cars of fresh vegetables, 1,499 cars of raw sugar and 303 cars of molasses. Inbound traffic to the lake territory consisted of crated material, fertilizer, agricultural machinery, supplies, etc. On the lower end of the Okeechobee branch, for which the new cut-off serves as an outlet, there was a movement of 32,790 cars loaded with 646,380 tons of sugar cane between the fields and the mill.

Dwindling Traffic

The expected timber traffic on the north end of the line materialized, as did the fish traffic from Lake Okeechobee, where the railway constructed a wharf for use by the boats bringing in the fish and vegetables from the lake area. However, most of the timber has now been cut and the commercial fishing on the lake greatly reduced, with the result that traffic from these sources has diminished to a negligible amount. Although, at the request of the cattlemen in this area, the railway built stock pens and other facilities for handling livestock on the branch, few cattle were ever handled, as the market for the area remained at Kissimmee to the west, and the cattle were driven across-country or trucked to this market.

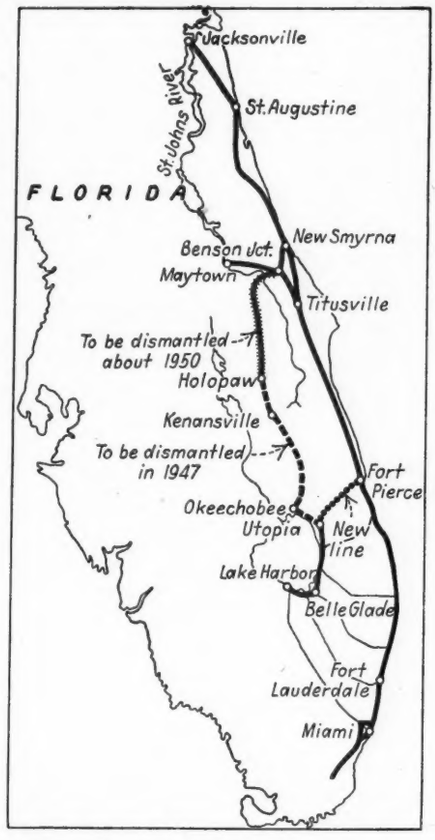
The wharves at Okeechobee, as well as others built by the railway at Belle Glade and Lake Harbor at the request

of the shippers, were abandoned some years ago because they were not being used.

Thus, the railway found itself with a long branch, paralleling the main line, highly productive from a traffic standpoint on its south end, but with a 150-mi. segment that was unproductive of traffic and traversed a thinly settled area where the poorness of the soil precluded the possibility of much agricultural development. The obvious answer was to build a cut-off to the southern section from the main line so as to permit better schedules and to eliminate the long branch-line haul to New Smyrna, paralleling the main line all the way.

Construction of the New Line

The Interstate Commerce Commission authorized construction of the cut-off and the abandonment of the old branch between Maytown and the point where the cut-off joins the branch, near Utopia, a total distance of 134 mi. One section of this line, between Maytown and Holopaw, 53.5 mi., has been leased to a lumber company for the operation of its log trains until the remaining timber is cut out, which will be in 1950; then the track will be dismantled. The remaining section, Holopaw to Utopia, 81 mi., has not been used since the inauguration of train service over the cut-off on April 1 of this year, and is now being dismantled. There are numerous trestles on this line, but no bridges, and the dismantling involves only picking up the 70-lb. rail and clearing certain channels of trestle piling. In the Maytown-Holopaw section there is a bascule draw span with trestle approaches approximately one quarter mile long across the St. Johns river, and when the time comes for dismantling this section the removal of this structure to clear the river will require the use of floating equipment.



Map of the Florida East Coast, showing the location of the new cut-off and the section of the Okeechobee branch to be abandoned

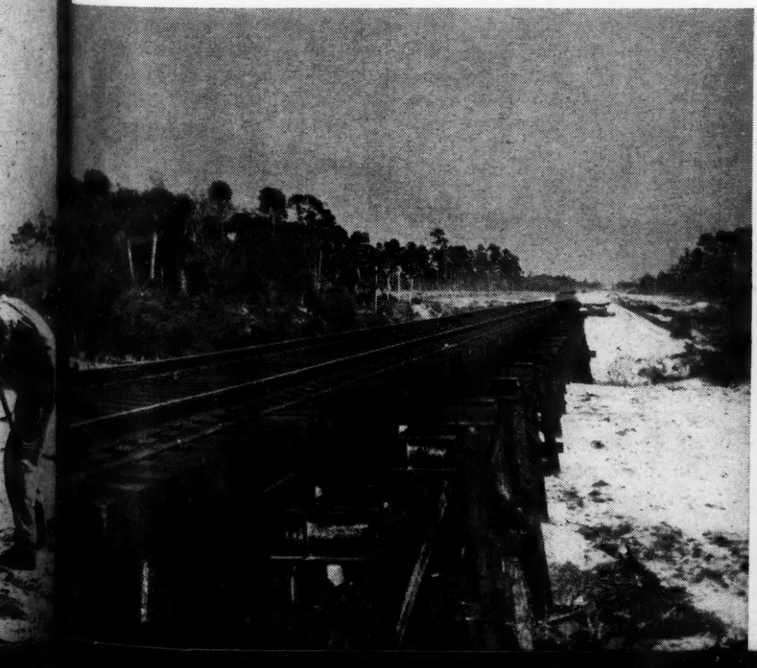
The idea of building a cut-off to permit the abandonment of the northern portion of the branch had been considered for some time past and several surveys of feasible locations were made under the direction of L. C. Frohman, chief engineer of the F. E. C. The line between Fort Pierce and Utopia, as shown on the map, was determined upon as the best, both from the standpoint of construction costs and operating convenience.

Heavy Rail Used

Authority for building the new line and abandoning a portion of the old line was obtained from the I. C. C. in April, 1945. Then began the negotiations with the War Production Board for priorities to obtain the necessary materials. This delayed the beginning of construction until October, 1945, and hindered progress throughout. The primary contract was let to the H. E. Wolf Construction Company, of St. Augustine, Fla., which handled all work except the track laying, which was sublet to the Royce Kershaw Company, of Montgomery, Ala.

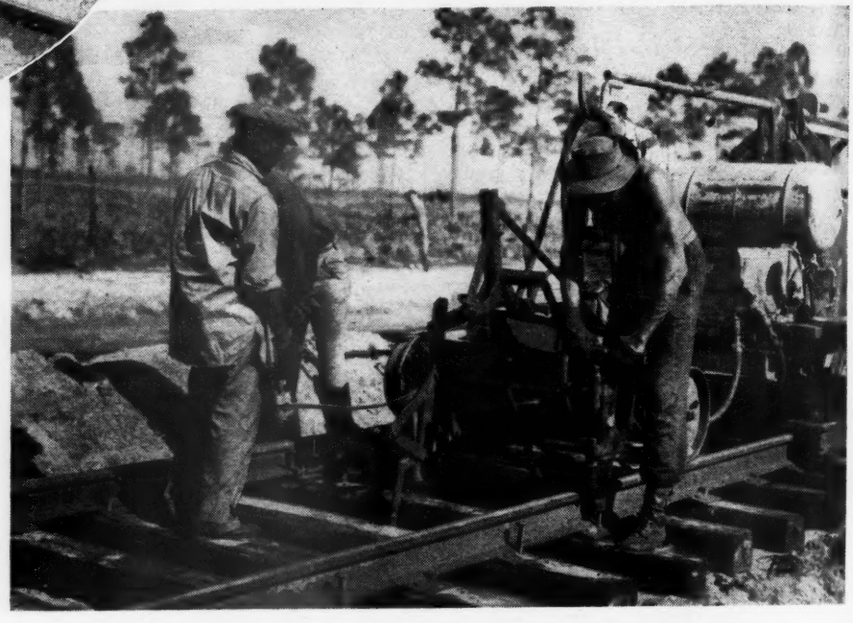
In view of the amount of traffic to be moved over the line, the F. E. C. determined that it should be built to sufficiently high standards to permit the operation of relatively heavy motive power over it. As a result, 90-lb. A. A. R. "A" rail, released from the main line (where it was replaced by 112-lb. R. E. rail), was used throughout and all ties are creosoted and fully tie-plated. All bridge timbers also are creosoted. The ballast consists of crushed rock on several miles of relatively poor roadbed material, on curves, on bridge approaches and through grade crossings, and of sand on other portions of the line.

Facing page—Raising track with a Nordberg power jack on a sand-ballasted section of the new line. Left below—One of the completed open-deck trestles, showing the steel cap and stringer construction. Right below—Laying 90-lb. rail with the track-laying machine



Left—Surfacing a rock-ballasted curve near Fort Pierce with Jackson electric tampers

Below—Spiking with the aid of a Kershaw pneumatic tie nipper



The total mileage of new main track is 29.32 mi. Two passing tracks also were built, each of capacity for a 75-car train, or 1.4 miles in all. New interchange and connection tracks at a point where the line crosses the main line of the Seaboard Air Line totaled 0.74 mi. An automatic interlocking plant was also built at this intersection.

No grade problems were encountered on this line, which reaches a maximum elevation of only 40 ft. above sea level. Except for 2.5 mi. across a savannah, or wet prairie, the terrain traversed is flat country with numerous "ponds" and drainage channels. Shortly after leaving Fort Pierce, some 1.5 mi. of dense growth was encountered, requiring fairly heavy clearing operations. For the rest of the distance the line traverses open pine flats and cypress ponds, with occasional heavy growth. The total amount of clearing and grubbing necessary amounted to 581.9 acres, all of which was carried out with machines.

The line required only 1.34 mi. of curvature, there being only three curves, one of 4 deg. leaving Fort Pierce yard, one of 3 deg. at the south junction and one of 1 deg., at M.P.3. Thus, the cut-off is 95.44 per cent tangent track, the longest continuous tangent extending 25.08 mi.

All grading for the embankment was done by side borrow, the borrow pits being drained into nearby canals or swamps. The total amount of embankment amounted to 640,353 cu. yd. When the old part of the line around Lake Okeechobee was built, muck extending to rock was encountered at some locations and the roadbed embankment was constructed with the muck. Later sand was hauled in and placed on top of the muck to provide a more stable subgrade. On the new cut-off, while several muck pockets were encountered, none of them was over 5 ft. deep and most of them had a depth of only 3 to 4 ft. Based on the earlier experience, all of these pockets were eliminated by removing the muck and filling the pockets with sand.

It was necessary to cross several drainage canals and the total length of all trestles is 1,356 ft. The minimum length of open-deck trestle is 56 ft. and the maximum 309.5 ft. One ballast-deck trestle, 117 ft. long and located on a curve, was also built. Because of the scarcity and high price of lumber for stringers and caps, a type of trestle construction that has been used with success on the main line of the F. E. C. was used for the open-deck trestles on the cut-off. This involves the use of a single wide-flange steel beam under each rail for the stringers, with a steel cap, also a wide-flange beam, on creosoted piling.

All construction work on the new cut-off was under the immediate supervision of W. B. Hill, assistant construction engineer of the railway, and under the general direction of L. C. Frohman, chief engineer.

Before the cut-off was constructed, it was necessary to haul cars loaded at Lake Harbor, for example, 196 mi. to New Smyrna over the branch before they could be consolidated with main-line trains. This compares with the present haul of 74 mi. to Fort Pierce via the cut-off. The advantages to the shippers in the way of faster schedules and to the railway in improved operating conditions are obvious. A further advantage to the railway is the saving in maintenance on a long stretch of unproductive line. There was also the further factor that, under present labor conditions, it was extremely difficult to get section laborers to work and live at the isolated locations in the barren, desolate country traversed by the old line.

A NEW "OLDIE".—A new postwar version of the color film "New York Calling!" produced by the New York Central, has recently been released and may be borrowed from more than thirty film libraries throughout the United States. A complete re-make of an earlier picture, it was filmed during 1946 and includes such scenes as the arrival of the liner Queen Elizabeth on her maiden voyage, a boat trip around Manhattan island and to the Statue of Liberty, Wall street, the Bronx Zoo, Botanical Garden, Coney Island, Rockefeller Center, Radio City Music Hall, the Empire State building and many other points of interest. It is available in 16 mm. sound only, with a running time of 22 minutes. Information on the film may be obtained by writing the Motion Picture Bureau, New York Central, 466 Lexington avenue, New York 17.

Wilson McCarthy

New Elections Bring "Western Control" to Rio Grande

John Evans

THE desire of the management of the Denver & Rio Grande Western —that the road become "a western railroad, run by western men"—was fulfilled on April 11, when Wilson McCarthy, co-trustee, was elected president; John Evans, Denver (Colo.) banker, was elected chairman of the board of directors and of the escrow trustees; and 13 other western business men were elected to the Rio Grande's board (announced in last week's *Railway Age*, page 803).

This action followed District Judge J. Foster Symes' consummation order and final decree in the railroad's much-litigated reorganization, signed on April 10 at Denver, terminating a trusteeship which was initiated on November 1, 1935. The reorganized company, which retains its former name, took control of the property on April 11. Under the plan, the old Denver & Rio Grande Western is consolidated with four other companies—the Denver & Salt Lake, the Denver & Salt Lake Western, the Goshen Valley and the Rio Grande Junction. Total capitalization of the company as reorganized is $155,173,127.

High Court Sustains Plan

The United States Supreme Court on February 3 paved the way for consummation of the line's reorganization when, for the second time, it refused to order the Interstate Commerce Commission to re-examine the plan which the latter and the district court at Denver had approved. (See *Railway Age* of February 8, page 323.) Following the court's decision, Mr. Evans, chairman of the road's five-man reorganization committee, declared that the Rio Grande would emerge from its trusteeship in the "finest physical condition in its history."

The D. & R. G. W. is a mountain railroad operating approximately 2,386 mi. of line extending from Denver and Pueblo, Colo., on the east to Salt Lake City, Utah, and Ogden on the west. As a vital link in the nation's transcontinental railway system, it had to meet, during the war years, the impact of the volume of traffic moving to the Pacific coast. This involved, among other things, a reversal of direction of the normal flow of loaded traffic.

The drastic decline in revenues during the depression had forced the railroad into bankruptcy in 1935, and led to the appointment of Mr. McCarthy and Henry Swan (now a board member and head of the finance committee) as co-trustees. Coincident with these appointments was the beginning of an aggressive improvement program which six years later aided the railroad in dealing with its war-time traffic burden.

The extent of additional freight traffic which the Rio Grande enjoyed during the war is indicated by the increase in its freight revenues—from $28,418,000 in 1941 to $60,859,000 in 1945, a jump of 114 per cent. During the same period, as a troop-handling railroad, the line's passenger ticket revenues alone leaped from $1,747,000 to $10,777,000, or an increase of 516 per cent.

The decline during the past 25 years in the production and movement of products of mines, mainly bituminous coal and metalliferous ores, has gradually brought about a transition in the character of D. & R. G. W. operations from those of an originating line to those primarily of a "bridge" route. This shift, which began about 1912, was particularly noticeable following the first world war and has since continued. In 1923, originated traffic on the road was 84 per cent of the total traffic handled. During the recent war years, interchange traffic increased so greatly that the originated business in 1945 was only 42 per cent of the total.

Traffic and operating revenues of the Rio Grande increased substantially during the years 1934 to 1937, inclusive, but declined in 1938 due to the business depression. The war brought about a recovery, and in 1945, all previous records for the road were broken when operating revenues soared to 221 per cent of the 1923-1925 average. The road's net income was $11,307,000 in 1942, $5,908,000 in 1943 and $2,505,000 in 1944. A net loss of $7,140,000 was reported for 1945, due mainly to a non-recurring charge of $12,700,000 for accelerated amortization of defense projects and increased federal income taxes.

Intensive Improvement Program

From 1935 until the outbreak of the war, $30,000,000 was spent on the road in repairing, building, rebuilding or eliminating bridges; in replacing cross-ties; in laying new rail; and many other betterments. Although the Rio Grande purchased 20 new heavy-duty steam locomotives during this period of rehabilitation, it was also one of the first roads in the country to apply Diesels to its road-haul operations, thereby achieving operation of heavier trains, with a simultaneous decrease in expensive helper service.

Improvements under the Rio Grande's trusteeship continued during and fol-

lowing the war. In 1945 a new 2,559-ft. tunnel was constructed through Tennessee pass (one of the highest altitudes reached by a standard-gage line in the country), replacing the old tunnel built in 1890. The new structure permits the handling of freight of greater width and height, and has improved operating conditions on this section of the road's Royal Gorge route between Denver and Glenwood Springs, Colo.

Important new industrial trackage through the Salt Lake valley was acquired by the Rio Grande in 1946, at public bidding for properties of the defunct Salt Lake & Utah. The purchases, among which are a number of sites for new industries as well as trackage, are particularly important because of present and potential industrial development in the area. Included in the transaction was trackage in West Jordan, Utah, Spanish Fork, Springville, Orem to Grundy and Salt Lake City.

A Mountain Railroad

The mountainous country in which the Rio Grande operates—cuts, winding canyons and extremely rugged terrain—adds considerably to the difficulties of operation. There are, for example, 50 tunnels in the 570 mi. of main line between Denver and Salt Lake City, ranging in length from 100 ft. to 6.2 mi. (the Moffat tunnel). Sustained grades of from 1 to 2.4 per cent (compensated) are not uncommon on the Rio Grande. For example, a 2 per cent compensated grade is encountered westbound for almost 50 mi., without interruption, over the D. & S. L. line from Denver to the Moffat tunnel.

The Rio Grande is unusual among trunk lines in that it still operates about 600 route mi. of narrow-gage trackage. The latter is gradually being abandoned. however, due to the extremely light traffic.

The railroad's original line runs south along the foot of the Rockies from Denver to Pueblo, then north and west, passing through the mountains over the Gorge route, to Salt Lake City and Ogden. One of the Rio Grande's most important developments occurred on June 15, 1934, with the opening of the 38-mi. Dotsero (Colo.) cut-off, between Dotsero on the Gorge route and Orestod, Colo., on the D. & S. L. This formed a new transcontinental route to the West approximately 175 mi. shorter than the Gorge route. The latter, however, continues to handle a substantial portion of the road's traffic.

Absorption of the D. & S. L. gives the new Rio Grande complete ownership of two routes crossing the Continental Divide. The D. & S. L. operated 232 mi. of single-track line extending from Utah Junction, Colo. (just outside Denver), to Craig.

The late David H. Moffat, a Denver capitalist, projected the Moffat line as a new short route to the West from Denver. Lack of sufficient financial backing in the beginning forced the road to go over the mountains instead of through them. As a result, it attained the dubious distinction of possessing a 4 per cent switchback and attaining the highest altitude reached by any standard gage railroad in the world. Later, increased backing and statement investment made possible the construction of the great Moffat tunnel through the Continental Divide, the second largest in the country, opened in 1928. The new tunnel permitted the abandonment of the old line over the mountains and shorted the route by 20 miles.

The D. & S. L. derived 70 per cent of its total revenues from three products —bituminous coal, crude and refined petroleum and livestock. Its earnings increased considerably following the construction of the Moffat tunnel and were further accelerated upon the opening of the Dotsero cut-off six years later. The road used the Moffat tunnel under a 50-yr. contract with the Moffat Tunnel Commission, a public body, with an option of an additional 49 years' lease later.

In February, 1930, the D. & R. G. W. purchased 21,334 shares of the D. & S. L.'s capital stock and obtained an option to purchase 7,635 additional shares at $155 per share. This option was exercised during 1932 and control of the company was acquired by the Rio Grande, under authority granted by the Interstate Commerce Commission on September 15, 1931.

Mr. McCarthy was born on July 24, 1884, at American Fork, Utah, and received his early education in the public and high schools in Salt Lake City and at Osgood Hall, Toronto, Ont. He was graduated from the Columbia University Law School in 1913, and subsequently began law practice in Salt Lake City. The folowing year he became assistant county attorney of Salt Lake county, and in 1916 became district attorney of the third judicial district. He was appointed district judge in 1919, and in 1926 became regent of the University of Utah. Mr. McCarthy was elected a state senator in 1928, followed in 1932 by appointment as western director of the Reconstruction Finance Corporation. He opened a law office in Oakland, Cal., the following year, the firm being McCarthy, Richards and Carlson.

On December 22, 1934, Mr. McCarthy became president of the Denver & Salt Lake and on November 18, 1935, was appointed co-trustee of the D. & R. G. W. He was a director of the D. & S. L., and is a director of the First National Bank of Denver, the Mountain States Telephone & Telegraph Co., and the Federal Reserve Bank of Kansas City (Denver branch).

Mr. Evans was born on September 24, 1884, and received his higher education at the University of Denver and at the Massachusetts Institute of Technology. Following his graduation from the latter institution in 1907 with an electrical engineering degree, Mr. Evans became chief engineer and assistant general manager of the Denver Tramway Company. From 1916 to 1923 he was president of the International Trust Company. His grandfather, John Evans, was governor of Colorado territory from 1862 to 1865.

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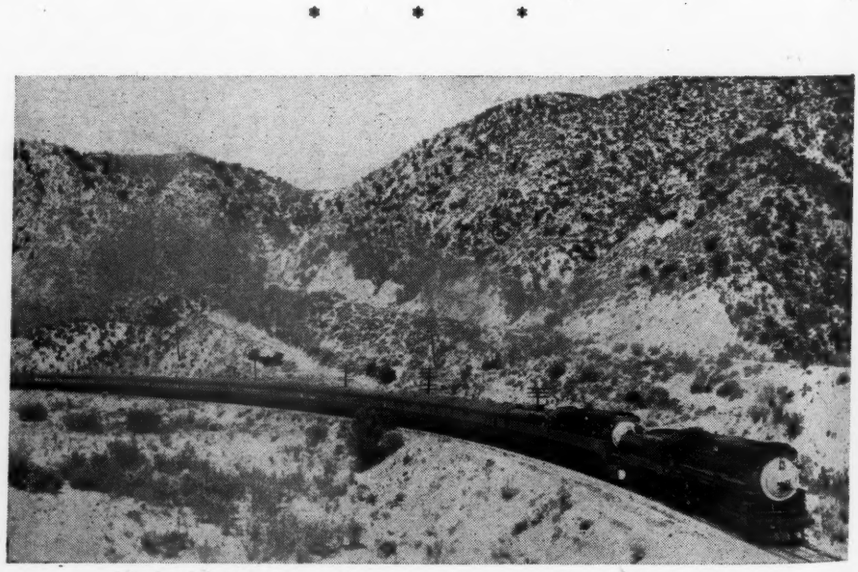


Photo courtesy of R. H. Kindig

Southern Pacific "San Joaquin Daylight" near Saugus, California.

Pennsylvania Saves Time with C.T.C.

New signaling on 47.7 miles of single track, handling about 30 trains daily, decreases average road time of through freight trains 36 min. eastward and 59 min. westward

CENTRALIZED traffic control has been installed by the Pennsylvania on five miles of two main tracks and 47.7 miles of single track on the Bald Eagle branch, which extends from Tyrone, Pa., to Lock Haven. Tyrone is 116.6 miles west of Harrisburg on the route between New York and Pittsburgh, and Lock Haven is 118 miles northwest of Harrisburg on the route between New York and Buffalo, via Harrisburg.

Tyrone is located on the Juniata river at an elevation of 806 ft. above sea level, and Lock Haven is on the Susquehanna river at an elevation of 555 ft. From Tyrone, the Bald Eagle branch ascends eastward at 0.6 to 0.8 per cent for about 8 miles to Dix at an elevation of 1,110 ft. From this crest the railroad follows the valley of Bald Eagle creek to Lock Haven, descending gradually at water grade. Curves are numerous but none is sharp enough to limit freight train speed below the 45 m.p.h. maximum authorized.

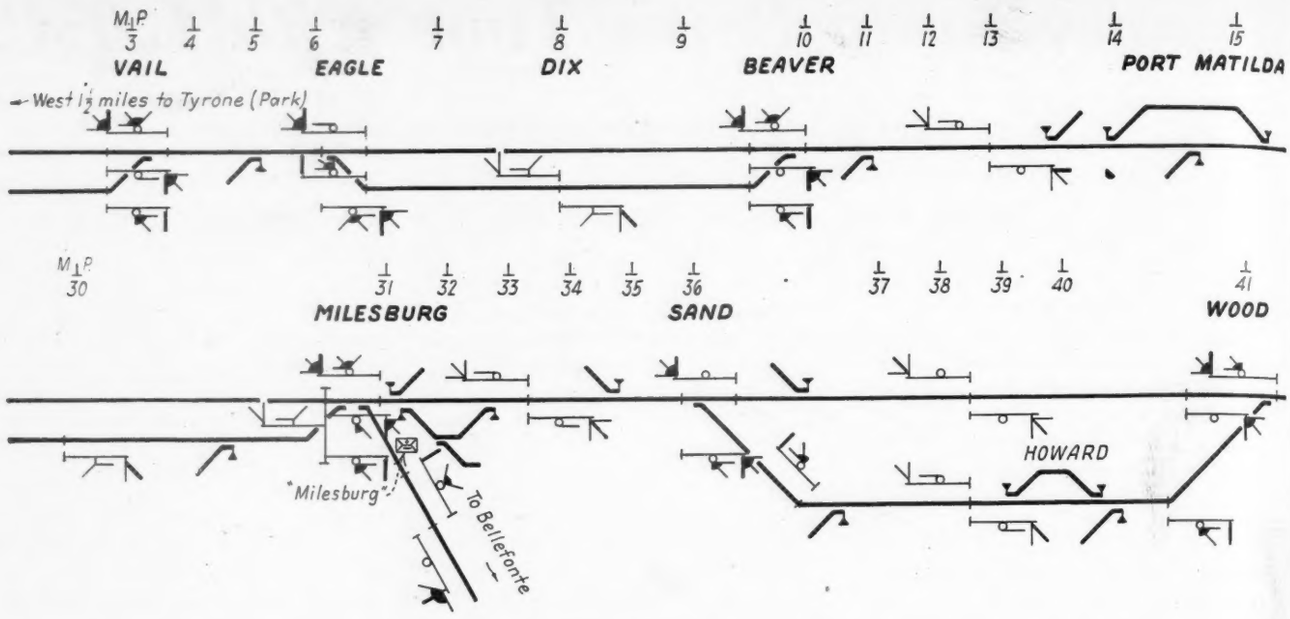
The maximum authorized passenger train speed is 60 m.p.h., and on six curves the speed is reduced to 45 m.p.h. The track is well constructed and maintained, with 130-lb. rail, good ties and crushed rock ballast.

Heavy Freight Traffic

A considerable volume of through freight traffic is handled on the Bald Eagle branch, which is a part of a route from the West to cities in upper New York, Canada and New England, via Lock Haven, Williamsport and Wilkes-Barre. About 75 per cent of the eastward traffic consists of loaded coal cars, which return westward empty. About six or seven coal trains are operated eastward daily, and the same number of trains of empty coal cars westward. By providing a helper locomotive from Tyrone eastward 8 miles up the grade to Dix, the road locomotives handle about 7,000 gross tons, ranging from 90 to 100 cars. In addition to the coal trains there are five preference merchandise freight trains each way daily, which handle from 4,500 to 5,000 gross tons. A local freight is operated each way daily except Sunday, and a local passenger train makes a round trip daily. The traffic varies on different days of the week and in different months of the year, so that the number of trains ranges from 25 to 30 daily.

Operating results under the C. T. C. system have been as follows: (1) Stops and slow-downs have been reduced: (2) average road time per freight train has decreased 36 min. eastward and 59 min. westward; (3) average speed of freight trains has increased 2.8 m.p.h. eastward and 4 m.p.h. westward; (4)

Above—A new practice on this project is the use of intermediate signals on the sidings. Below—The signal on the siding is the pedestal type which gives better range than a dwarf



the capacity of the line has increased.

A main track and a siding extend east from Tyrone (Park) 1½ miles to Vail. Also a main track and a siding extend from Lock Haven west to Post. Some years ago a second main track on a more favorable grade and different alinement was constructed between Wood and Sand, 5 miles. The remainder of the line between Vail and Post is single track. Between Wood and Sand tonnage trains are routed over the new line, and other through trains in both directions are routed over this new line if it is available; otherwise they go over the old line.

Long sidings for the meeting and passing of trains are located at Eagle, Julian, Milesburg and Beech Creek. Prior to the installation of C. T. C., there was an interlocking at Wood, with a power switch machine and signals at Sand, remotely controlled from Wood. A mechanical interlocking at Milesburg included the switch at the east end of the siding as well as the junction switch leading to a short branch to Bellefonte. Mechanical interlockings, which also served as block stations, were in service at Eagle, which is the west end of Eagle siding; at Port Matilda, from which the east end of the siding was remote controlled; and at Mill Hall (M. P. 50) for control of a siding since removed. Spring switches were in service at Baker, which is the west end of the Milesburg siding; at the east end of the Julian siding; and at the east end of Beech Creek.

Train movements were authorized by timetable, train orders and manual block, with offices open three tricks at Park, Eagle, Port Matilda, West Julian, Milesburg, Wood, Beech, Hall and Lock Haven. The spring switches, block stations and interlockings at Eagle, Port Matilda, West Julian, Wood, Beech and Hall were removed after the installation of centralized traffic control, which includes power switch machines and semi-automatic signals for directing train movements at both ends of three long sidings, at both ends of the two main tracks between Sand and Wood, and at the end of the siding at Vail and at the junction switch at Milesburg. All of this territory is controlled from a C. T. C. machine located in a new office building at Milesburg.

Signaling Arrangements

The signals in this installation are the position-light type, with display aspects according to the A. A. R. Standard Code. Every signal is at the immediate right of the track governed, and to comply with this practice each siding was thrown over to 20-ft. centers at one end in order to locate the station-leaving signal for the main track between that track and the siding.

The leave-siding signals are not dwarfs, as this term is ordinarily applied, but rather the pedestal type, being mounted on short masts high enough to bring the lowest lamp 3 ft. 10 in. above the base of the rail. These pedestal signals can be located between tracks on 15-ft. centers without fouling the clearance limits, and they provide better visibility.

Sidings Are Signaled

Interesting features of this C. T. C. project are the signals to facilitate movements into and out of the sidings, as well as the signals on each siding to permit a following train to be moved into a siding. An important point is that the sidings are long — 234-car capacity at Beech Creek, 137 cars at Milesburg, 144 cars at Julian, and 408 cars at Eagle. The length of these sidings improves the chances to make non-stop meets between opposing trains, and a second advantage is that, except for the long trains, two trains in the same direction can be closed in on a long siding when meeting an opposing train.

The turnouts at the ends of the sidings are No. 15, good for train speeds of 30 m. p. h. when entering, and the signaling permits enginemen to bring their trains up to and through the turnouts onto the sidings at this speed, thereby saving train time compared with operation under control, prepared to stop at the entering signal or at any point within range of vision on the siding. The sidings are equipped with track circuits for the automatic control of signals, depending on track occupancy as well as C. T. C. lever control. When a switch is reversed and the signal lever is operated for a train to enter a siding which is unoccupied, the distant signal to the siding displays the Approach-Medium aspect, Rule 282, which indicates "proceed, approaching next signal at medium speed." The home signal displays the Medium-Clear aspect, Rule 283, which indicates "proceed; medium speed within interlocking limits." Thus the engineman can, with safety, bring his train up to and through the turnout at medium speed, making reduction in speed on the siding as required by indication of the intermediate signal.

The intermediate signals on the sidings serve as distant signals for the leave-siding signals as well as to space trains on a siding. These intermediate signals on the sidings are the pedestal type with two operative "arms." Referring to Fig. 2, showing the Beech Creek siding, the eastward intermediate

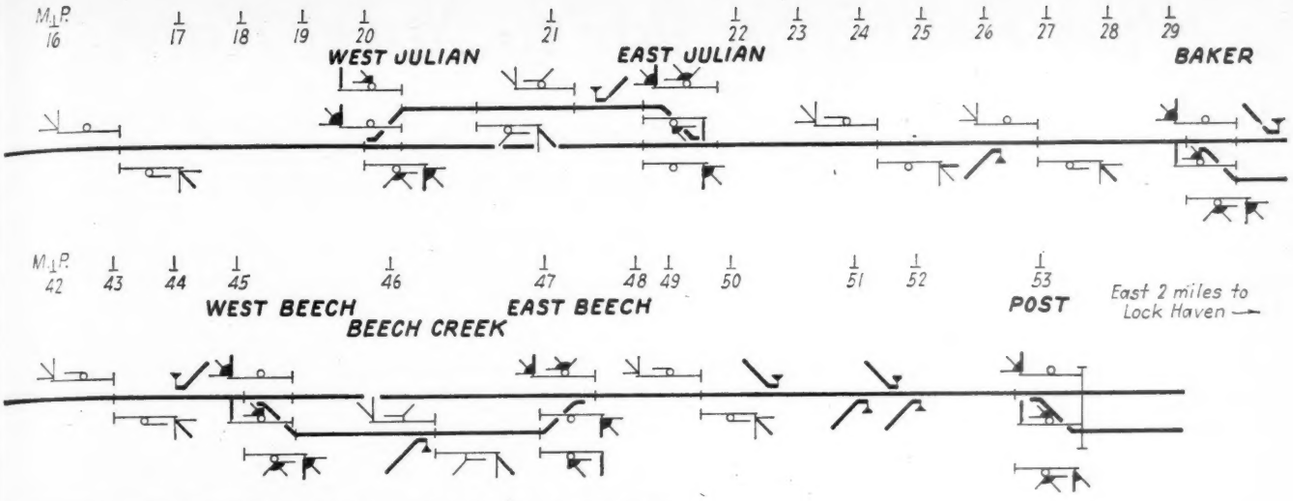


Fig. 1 (Facing page and above)—The track and signal plan of the centralized traffic control territory between Tyrone and Lock Haven

signal on the siding is No. 462. When the leave-siding signal at the east end of the siding is displaying the Stop aspect signal 462 displays the Approach aspect.

With a Train on the Siding

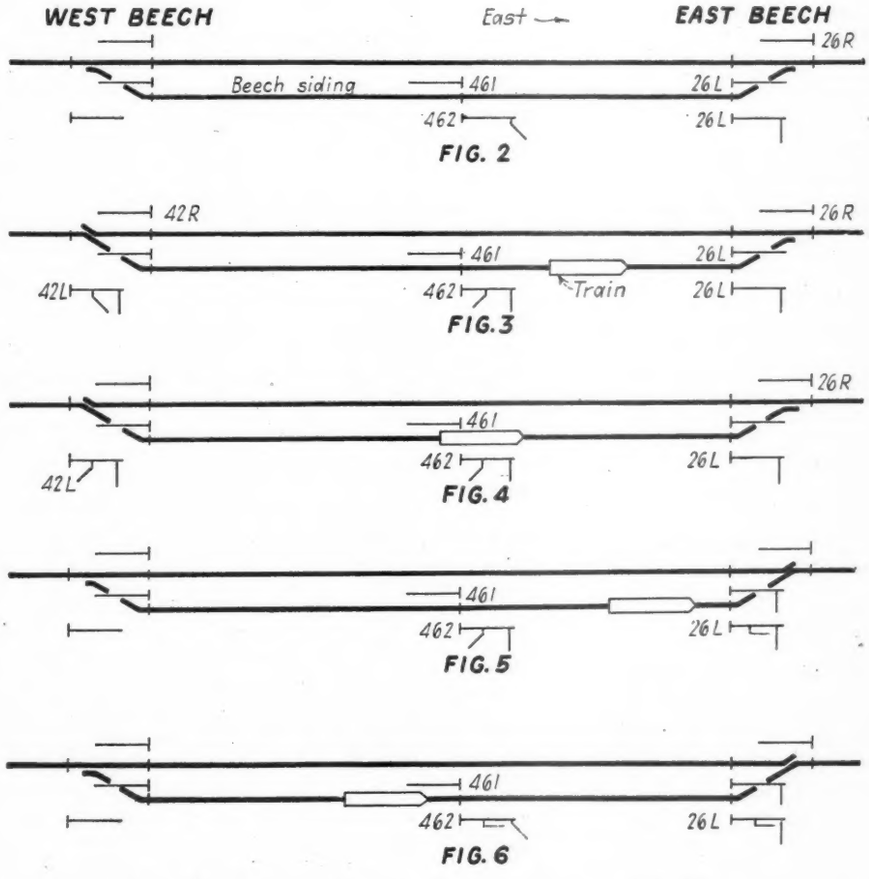
In Fig. 3 an eastward train is shown stopped on the siding east of intermediate signal 462, which is displaying the Restricting aspect, this being the most restrictive aspect displayed by such a signal. In this instance, if the west switch is reversed and home signal 42L is cleared for a second eastward train to enter the siding, then this home signal 42L displays the Slow-Approach aspect, Rule 288, indicating "proceed prepared to stop at next signal; slow speed within interlocking limits." If the rear of the first train has not passed signal 462, as shown in Fig. 4, then the home signal 42L can be cleared to display the Restricting aspect, Rule 290, to allow the second train to pull in on the siding at restricted speed prepared to stop short of the train ahead.

When a train on a siding at a location shown in Fig. 5 is to depart, with no train ahead for two or more blocks, the switch is reversed and leave-siding signal 26L is cleared to display the Medium-Clear aspect, Rule 283, indicating "proceed; medium speed within interlocking limits." After the rear end is out on the main track, the train can be accelerated to authorized speed. If a preceding train of the same direction has cleared only one block, the leave-siding signal 26L in Fig. 5 can be cleared to display the Slow-Approach aspect.

Referring to Fig. 6, with an eastward train on the siding west of the intermediate signal 462, and with the east switch reversed and leave-siding signal 26L cleared to display Medium-Clear, then intermediate signal 462 on the siding displays the Approach-Medium aspect.

This permits the engineman to accelerate his train promptly, with the knowledge that he is to pull out through the turnout at medium speed. This is a help, especially where sidings are on curves with mountains that obstruct the view ahead. Thus the signaling provided to direct trains when entering, departing or moving on the sidings is an important factor in facilitating such movements.

This C. T. C. installation was planned and constructed by forces of the Pennsylvania, the major items of apparatus being furnished by the Union Switch & Signal Co.



Figs. 2 to 6—Illustrating use of signals on a typical siding

Past Policy No Bar to Novel Rates

I. C. C. approval of trainload rates after many rejections shows it can alter a settled policy to meet new conditions

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THE *Freight Traffic Report* of the Federal Coordinator of Transportation suggested that rates, lower than carload rates, be established upon basic commodities such as petroleum, grain, coal, ores and lumber, moving in solid trainload or multiple-carload lots, in order to afford the railroads a better opportunity to compete for such traffic with competitive pipe line and waterway carriers. This suggestion raised again the question whether or not railroads could, under the Interstate Commerce Act, establish rates contingent upon the simultaneous shipment of freight in quantities aggregating solid trainloads. There were those who expressed doubt that the act, as administered and interpreted by the Interstate Commerce Commission and by the courts, would permit the establishment of such rates.

There is evidence that the movement of freight in solid train lots can be used to reduce materially, and, in some cases, to eliminate entirely the expenses incident to collecting and assembling the cars into trains at the originating terminals, the classification of cars at intermediate yards en route, and the distribution of the cars at the destination yards. Solid trainloads of freight cars can be moved as units from origin to destination by providing and changing motive power at the originating and junction points. The yard expenses are said to constitute more than half of total railroad freight movement costs.

The *Freight Traffic Report* of the Federal Coordinator found that the road movement of freight between terminals accounted for about 46 percent of operating expenses while yard operations consumed 54 percent of operating costs. Terminal yardings accounted for 70 percent of the yard operating costs and intermediate yardings about 30 percent. Yard costs were found to be over $11 per car.[1]

The average number of cars in all freight trains moved in 1932 was 26 loaded cars. Manifest or scheduled freight trains averaged 48 loaded cars; and drag, tonnage, or dead freight trains —used in many instances to transport basic freight of the types to which solid trainload movement is particularly useful—averaged 32 loaded cars. The average number of cars per freight train at the present writing is 52, reflecting increases in the size of motive power, in scheduled or manifest train operation, and an increased volume of traffic.

The argument has been advanced against trainload-lot freight rates that these rates could be used by large shippers and distributors to crush the competition of smaller shippers and consignees. That special rates of various types have been used in the past for this purpose and with this result is a matter of record—of which there is abundant evidence in complaints before the Interstate Commerce Commission and cases before the courts. Many of these special rates, however, were not trainload-lot or even multiple-carload rates, but rates which were found for various reasons to create unjust and unreasonable discrimination or undue preference or prejudice. The advantages and problems of trainload-lot or multiples carload lot rates should be re-examined in the light of present-day conditions. Large shippers of basic commodities often are able to ship such goods in solid cargo lots at favorable rates by water carriers or use private shipping facilities, or avail themselves of the minimum-tender requirements for shipment by pipe line or use proprietary or closely affiliated pipe line facilities. Small shippers could, as they do in shipping by pipe lines, use the trainload-lot freight rates alone or jointly with other small shippers by combining their shipments into larger lots.

The I. C. C. Policy

There is some opinion to the effect that the Interstate Commerce Commission in the past has disapproved trainload-lot rates as unduly prejudicial of small shippers and unduly preferential of their larger competitors. This opinion is not well founded factually because the commission prior to its decision in the *Blackstrap Molasses Cases* was not called upon to decide the legality of tariffs providing rates on multiple-car or trainload-lot shipments of more than 24 cars and in many cases a much smaller number of cars. Such rates cannot be considered trainlot rates under present-day conditions of transportation, nor can the views expressed by the commission in these cases be considered as an outright condemnation of trainload-lot or multiple-carload-lot rates.

The Interstate Commerce Commission has had the justifiability and legality of freight rates contingent upon the shipment of multiple-car lots of goods at one time before it directly in several cases in which the legality of tariffs was challenged, and upon numerous other occasions the commission has remarked upon such rates as dicta in passing upon rate questions.

A "Cargo Rate"

In the case of *Paine Bros. & Co. v. Lehigh Valley R. Co., et al.*, decided in 1897, the question of the legality of a freight tariff, filed by the Lehigh Valley Railroad, was challenged. The tariff established rates on "cargo" or "train lots" of ex-lake grain, grain brought down the Great Lakes by steamer and transferred to the rail line at an eastern Great Lakes port, contingent upon the shipment at one time of 3,000 bushels or over of wheat, corn, rye and barley; and 10,000 bushels or over of oats. The rates upon the "cargo" or "train lots" shipment were on a lower basis than the corresponding rates on carload shipments from Buffalo, N. Y., to North Atlantic ports. The commission ordered the defendants to revise the rates and indicated without making a formal order that the effect of "cargo" or "train lots" rates would be to give the larger dealer a monopoly of the business, and upheld the contention of complainants that "cargo" or "train lot" rates were unreasonable and unjust and subjected complainants to unreasonable prejudice and disadvantage and would give undue preference and advantage to shipments of grain in large lots in violation of Sections 1, 2 and 3 of the Interstate Commerce Act.[2]

In *Corstens Packing Co. v. O. S. L. R. Co. et al.*, decided in 1909, the question of the validity of multiple-carload rates,

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Editor's Note: Preceding articles in this series in which Dr. Wilson has been explaining the potentialities of innovations in rate making appeared in our November 2 and December 14, 1946, and March 29, 1947, issues.

[1] Federal Coordinator of Transportation, Section of Transportation Service, *Freight Traffic Report*, Washington. D.C., 1935, Vol. I, 95 et seq.

[2] (7 ICC 218). 1897.

in this instance on ten-car lots, was commented upon by the commission but the matter was not passed upon. The commission said in part:

"Because of the long-continued practice of carriers to which the commerce of the country has adjusted itself the commission denied reparation on ship- as valid and justified a carload rate that was less proportionately than the rate on a less-than-carload shipment of the same commodity. But whether that principle may wisely be extended further to what may be called wholesale rates—that is to say, rates established by carriers on the theory that a shipper who is able to deliver traffic in ten or more cars is entitled to lower rates proportionately than a shipper who is able to deliver traffic by the carload only, is a very doubtful question . . . . It is referred to only because we desire it to be understood that nothing herein shall be taken either as an approval of or acquiescenec in a ten-carload rate, or to use a convenient phrase, in wholesale rates of any kind beyond the carload rate."[3]

A Multiple-Carload Rate

In *Woodward-Bennett Co. v. S. P. L. A. & S. L. R. Co.*, decided in 1914, the tariff of the carrier providing four different levels of rates, contingent upon the number of carloads shipped at one time, for the transportation of cattle in carload lots was held to be unlawful. The tariff of the carrier provided the highest rate on shipments of less than 8 carloads at one time; a somewhat lower rate upon the shipments of 8 to 14 carloads at one time; a still lower rate on shipments of 15 to 19 carloads at one time; and the lowest basis of rates on shipments of 20 carloads or more.

In its decision in this case the commission stated:

"A lower rate for a trainload lot than for a carload is regarded as unlawful, because it is in effect allowing lower rates upon a condition that only a few shippers can comply with, and consequently is an injustice to those unable to ship the required quantity."[4]

In *J. W. Wells Lumber Co., v. C. M. & St. P. R. Co.*, decided in 1916, the commission denied reparation on shipments of logs from points on the Superior Division, Wis., to Menominee, Mich., on the ground that the rates had not been shown to be unreasonable. The commission reiterated its policy that the fact that certain traffic is hauled in trainload lots cannot be made the basis of rates different from those applied to shipments in single carloads and held that the defendant should immediately discontinue publishing lower rates on shipments of lots of more than one car than on carload shipments, but held that the complainant in this case was not entitled to reparation because the lower rate from the more distant point was predicated upon the shipment of 20 carloads or more at one time and therefore there was no violation of the Fourth Section of the Interstate Commerce Act with respect to shipments in any number of cars less than the specific number. The commission remarked:

"The commission has repeatedly held that the mere fact that certain traffic is hauled in trainload lots cannot be made the basis of rates different from those applied to shipments in single carloads. This is on the theory that to permit the practice would be in effect to allow lower rates upon a condition which only a few shippers could comply with and to do an injustice to those unable to ship the required quantities."[5]

In *Miller and Lux, Inc., v. S. P. Co., et al.*, decided in 1916, the commission found unreasonable rates charged for the transportation of range or feeder cattle in carloads from points in California and Oregon to points in California and Nevada, made upon the basis of higher rates for single car shipments than for shipments of a larger number of cars at one time, ranging from 12 or more, to 15 or more cars. In its decision in this case the commission stated:

"The commission has repeatedly held that the fact that certain traffic is handled in train-lot loads cannot be made the basis of rates different from those applied to shipments in single carloads."[6]

In several cases involving the reasonableness of carload rates upon various commodities, the commission has commented upon the desirability and legality of "train lot" rates, even though the question of "train lot" rates has not been directly raised in the cases.

In *Anaconda Copper Mining Co., v. C. & E. R. Co., et al.*, decided in 1910, stress was laid upon the fact that blast furnace coke moved in train-lot quantities, while other coke ordinarily moved in carload lots only, as a reason for justifying lower carload rates on blast furnace coke than on other coke. In its decision in this case the commission stated:

"Whatever difference there may be in the cost to the carrier between traffic in trainloads and traffic in carloads, it appears from the general course of legislation with respect to commerce between the states, from the debates and reports to the various committees in Congress when the Act to Regulate Interstate Commerce was under consideration, from the better considered court opinions, and from the reports and opinions of this commission that to give greater consideration to trainload traffic than to carload traffic would create preference in favor of large shippers and be to the prejudice of small shippers and the public."[7]

In *Rickards v. Atlantic Coast Line R. Co.*, decided in 1912, rates charged for the transportation of mine-prop logs from points in North Carolina to Norfolk, Va., were found unjust and unreasonable insofar as they exceeded the rates contemporaneously applied to saw-logs. The argument was advanced that mine-prop logs were handled in single carloads while saw-logs were moved in solid trains. The commission stated:

"The fact that certain traffic is hauled in trainload lots while other traffic moves in carloads cannot be made the basis of a difference in rate."[8]

In *Planters' Compress Co., v. C. C. C. & St. L. R. Co., et al.*, decided in 1905, the refusal of defendant carriers to grant lower carload rates on cotton in carloads of 45,000 lb. or over than the rates made upon cotton in any quantity lots, carload or l. c. l. was held not to be a violation of the Interstate Commerce Act.[9] A similar conclusion was reached in *American Round Bale Press Co. v. A. T. and S. F. R. Co.*,[10] and in *Anderson, Clayton and Co. v. A. T. and S. F. R. Co.*, decided in 1914.[11]

General Attitude

In *Ex Lake Iron Ore from Chicago to Granite City, Ill.*, decided in 1926, and reaffirmed in a later decision handed down in 1927, the proposed reduced rate on ex-lake iron ore in carload lots from Chicago to Granite City, Ill., was found reasonable and justified, the suspension order was vacated and the order of the commission in the first hearing was affirmed on reargument.

Attention was directed by the protestants to the policy of the commission not to permit lower rates upon train-lot quanities of freight than on carloads. The commission stated:

"We are not permitting such a rate here nor does anything here said or done forecast in any way a change in the policy mentioned. The fact that traffic to which [the reduced rate] will apply will in all probability move largely in trainload quantities is, however, clearly pertinent in considering whether the rate will cause gain or loss to respondents."[12]

In *Private Wire Contracts*, decided in 1918, the commission in commenting upon the principle of rate making contingent upon the number of carloads shipped simultaneously stated as a dictum that:

"There is no proper analogy between private wire service and the practice of aggregating shipments into carload lots and shipping them at carload rates."[13]

In dicta in a number of other cases the commission has commented in passing upon the general policy regarding making rates upon trainloads as compared with single carload lots.

In *Kingan & Co., v. Director General, Agent*, decided in 1924, the commission found a rate of $5 per car for the movement of livestock from stockyards to

[3] (17 ICC 324, 328), 1909.
[4] (29 ICC 664), 1914.
[5] (38 ICC 464, 465), 1916; see also *1915 Western Rate Advance Case, Part II*, (37 ICC 1:4, 155), 1916.
[6] (41 ICC 617), 1916.
[7] (19 ICC 592), 1910.
[8] (23 ICC 239), 1912.
[9] (11 ICC 382), 1905.
[10] (32 ICC 458), 1914.
[11] (32 ICC 458), 1914.
[12] (120 ICC 75), 1926 and (123 ICC 503), 1927.
[13] (50 ICC 731), 1918.

packing plant in Indianapolis not unreasonable. No question of trainload rates was raised but in commenting upon the fact that some, but not all, of the cars moved in solid trains the commission stated laconically:

"We have never favored reduced rates per trainload."[14]

In *Advances in Rates for Transportation of Coal,* decided 1912, involving the suspension of increased rates on coal in carloads, the commission stated:

"There could be no better illustration that this of the fallacy of placing reliance upon ton-mile earnings as a basis for rate-making. As the Commission has heretofore found in many cases, a much fairer basis is that found in the earnings per car-mile and per train-mile. Much of the profitable freight carried by the railroads of the United States, and perhaps this might be made broader and it could be truthfully said that most of the freight which pays the carriers the best is that which yields the lowest rate per ton-mile."[15]

In many cases the commission has commented upon the fact that increased trainloads, increased car capacity, increased density of traffic, material decrease of the ratio of operating expenses to income, and the elimination of grades—all are factors which should be considered in making lower rates.

In *North Fork Cannel Coal Co., v. Ann Arbor R. Co., et al.,* decided in 1912, the commission in commenting upon the reasonableness of carload rates on cannel and bituminous coal stated:

"The fact that cannel coal moves in single-car lots while there is a trainload movement of bituminous coal justifies a higher rate on the former (cannel coal) than on the latter (bituminous coal). . . .Solid trains of cannel appear to be unknown, while such a movement is the rule rather than the exception from bituminous fields."[16]

In a more recent case, *Live Stock Rates—Southern Territory,* decided in 1930, carload rates on livestock based upon distance scales were found not unreasonable. In a decision in this case the commission commented:

"It is reasonable to assme that the movement of livestock in trainloads makes for lower transportation costs."[17]

Michigan Sand Case

Of special interest in this controversial matter is the decision and order of the Michigan Public Utilities Commission in 1935 in the complaint of the Michigan Trucking Association et al. against certain tariffs of the Pere Marquette, Michigan Central and Grand Trunk Western railroads.

These three railroads filed, to become effective upon the statutory notice required by the Michigan Public Utilities Law, tariffs naming freight rates upon sand and gravel in shipments of 15 carloads as minimum applicable in intrastate commerce.[18] The complaint was filed by the Michigan Trucking Company, the Michigan Limestone & Chemical Co., and the Kelly Island Limestone & Transport Co. The complainants petitioned the Michigan Public Utilities Commission to reject the tariffs of the respondent railroads. The rates having already gone into effect, the commission chose to consider the petition as a complaint against the rates rather than as a petition for the suspension of the rates. Other sand and gravel shippers were permitted to intervene on behalf of the respondent railroads and the Great Lakes Steel Corporation was permitted to intervene on behalf of the complainants.

The tariffs attacked published rates of 40 cents per ton on sand and gravel in trainload lots of 15 carloads or more from Oxford, New Hudson and Green Oak, Mich., to points on the lines of the three railroads within a certain area of the Detroit switching district. Two questions were raised by the complaint: first, whether or not the fifteen-car minimum gave undue or unreasonable preference or advantage to any particular person, firm or corporation in violation of the Public Utilities Act; and, second, whether or not the delivery restrictions constituted undue discrimination.

The respondent carriers took the position that the petition should be dismissed upon the grounds that the complainants were not shippers by rail proposing to ship sand or gravel in 15-carload lots or in any other quantities; that the petition being for the rejection of the tariffs, it should have been filed prior to the effective date of the tariffs and not after the tariffs had gone into effect; and that the rates named in the tariffs were not discriminatory. Evidence was introduced indicating that the value of 15-car trainload shipments of sand or gravel was from $250 to $1,000. No evidence was offered that dealers were unable either to finance the purchase of such trainload lots or to dispose of consignments of this size. No testimony was adduced that any dealers were in danger of being forced out of business by the arrangement. There was some testimony that small dealers handling sand and gravel along with other building materials did not ordinarily purchase trainload lots but were benefitted from trainload rates through purchasing from wholesale dealers. One witness testified that his company was not accustomed to buying as many as 15 carloads of sand or gravel at one time and that it would be inconvenient to handle that amount, but he testified that his company did purchase sand by the boatload.

Although the question of lawfulness of trainload freight rates had never before been brought before the Michigan Public Utilities Commission or predecessor regulatory bodies, trainload-lot rates were not new. Such rates were used in the transportation of lumber. Originally the rates were based upon contracts entered into by shippers and the railroads, but later tariffs were published superseding the prior contracts made illegal by the Public Utilities Act. A typical tariff of this sort published a rate of $2.25 per 1,000 bd. ft. Stratford and Muskegon, Mich., via the Pere Marquette Railway, applicable to shipments of 18 or more carloads. This tariff was originally put in effect in 1908 to replace a contract with a lumber company.

In addition to the tariffs naming rates upon sand and gravel in trainloads, several other trainload-lot tariffs were in effect in Michigan intrastate commerce. One of these tariffs published a rate of $12 per car between Mount Pleasant and Midland, Mich., via the Pere Marquette, in lots of approximately 10 cars per day, subject to a minimum of 6 cars per day. The Michigan Central Railroad had published a switching rate of $10 per car in lots of three or more cars between the main plant of the Great Lakes Steel Corporation and the Michigan Steel Division plant of the same corporation. Another tariff of this kind, published by the Detroit, Toledo & Ironton Railroad, had established a rate of $14 per car in lots of five or more carloads between the River Rouge plant of the Ford Motor Company and Ecorse plant of the Great Lakes Steel Corporation.

Switching Rate Precedent

It was argued that the establishment of multiple-carlot switching rates was inadmissible as a precedent for the establishment of trainload line-haul rates because of the sharp line of demarcation between switching movements and line-haul service. While conceding the soundness of the reasoning, the Michigan commission did not find it applicable to the case, because the movements in both instances, switching and line-haul, included something that might be likened to a line-haul and something that might be likened to switching movement. The commission in its decision stated:

"Since line hauls are ordinarily made by train movement and since switching involves primarily the delivery of individual cars to particular sidings, it would be proper to establish rates made up of three specific charges: one for the switching that resulted on the assembling of a train, one for the line haul of the train, and another for breaking up the train and placing individual cars on sidings. Where rates so made it would be absurd to make any concession in the line haul rate for shipment of several cars or a trainload at one time. And it would be reasonable to make concessions in the two switching charges or either of them for shipment of more than one car at a time.

"Rates have never been made that way. One reason for the present system, which combines switching and road haul charges, is that many movements involve not two but many switching operations and not one but several road hauls.

[14] (89 ICC 550), 1924.
[15] (22 ICC 604), 1912.
[16] (25 ICC 241), 1912.
[17] (171 ICC 721), 1930.
[18] (Michigan Public Utilities Commission, D 2945, 1935).

A tariff that would account accurately for each movement would be preeminently fair and reasonable, but it would be so complicated that no one but the man that made it could understand it. The accounting that would be necessary to such a rate structure would bankrupt the carriers even in times of prosperity."

The commission found little difference between the movement of a 15-car train in the line haul involved in this case and a switching movement of three or more cars. Both involved movements akin to switching movements and to line movements. The economy in railroad operation in each instance grew out of the switching movements. In the case of the sand and gravel movements the economy could be reflected only in the total rate, while in the case of the so-called switching movements, the savings could be reflected only in the switching charges. "If there is a difference in the situations underlying these . . . rates, it favors the line hauls, because the train minimums are higher in the tariffs governing them and because they apply to low-value commodities in relation to which there can be no question of promoting a monopoly."

The rates on sand and gravel involved in the Michigan case were made to meet motor truck and water competition. Testimony was introduced to show that there was potential motor truck competition from one of the pits, and actual competition from numerous other pits within a 40-mile zone around Detroit Testimony revealed that water competition was actual and intense, in fact, "lake sand" was brought by water into the Detroit market and sold at delivered prices lower than the railroad freight charges alone, until the rail charges were reduced by the establishment of the trainload freight rates. This competition, it was found, had practically closed the market to the pits at the points of shipment covered by these tariffs.

The commission found that the complainants had failed to show that the tariffs were unlawful in violation of the statutes of Michigan or that they were "grossly discriminatory" or gave undue preference and advantage to any shipper or receiver of freight, and the complaint was dismissed. After stating that the Interstate Commerce Commission and the Michigan Public Utility Commission had uniformly held that it was not the function of regulatory authority to prevent railroads from meeting the competition of unregulated carriers, the Michigan commission in its order dismissing the complaint stated:

"Any other policy would transform regulation into destruction. No claim can be made that a rate honestly framed to meet competition is discriminatory. If discrimination exists it is the result of conditions the competitive rate is designed to meet, not of the competitive rate. Where the competition can be met without loss to the carrier or burden to other shippers only through the establishment of a trainload rate, a presumption is thereby created in favor of such a rate.

"In meeting competion the rail carriers are compelled to deal with bulk movements not involved in competition with land carriers. Boats handle sand and gravel in full cargoes each of which equals or exceeds the volume and weight of material carried by a 15-car train. A logical and practical way of meeting a bulk rate, so long as no new discrimination is thereby created, is to establish a similar rate. In rail traffic this can mean only a trainload or multiple-car rate.

"We find nothing in our statute or in the facts before us to justify a decision that a trainload rate as such is unlawful. . . . We believe the rail carriers should be given reasonable latitude in meeting competition. We would, in any event, be loath to disturb the trainload rates heretofore in effect."[19]

Blackstrap Molasses Cases

In a general investigation instituted in 1936 by the I. C. C. on its own motion, it inquired into the lawfulness of tariffs of the Illinois Central, Yazoo & Mississippi Valley, Alton, C. B. & Q., and Chicago & Illinois Midland railroads which published a rate of 17½ cents per 100 lb. on blackstrap molasses in tank cars from New Orleans and other Gulf of Mexico ports to Peoria, Ill. The tariffs restricted the rate to this molasses when used for the manufacture of acetone, butyle acetate, ethyl acetate and butyl alcohol. The railroads published in other tariffs a rate of 31 cents per 100 lb. on blackstrap molasses without restriction as to use. The shipments moved at the 31-cent rate but the tariffs provided that the charges would be reduced to the basis of 17½ cents per 100 lb. on each 500 lb. of inbound molasses to each 100 lb. of outbound shipments of the solvents named above, upon presentation of the paid inbound freight bills and copies of outbound bills of lading.

The arrangement was described as a species of transit arrangement. Its purpose was to attract back to the railroads traffic which formerly had moved by rail but which had become competitive with water carriers and with privately operated water transportation facilities. The commission found that the effect of these tariffs was to make the 17½-cent rate available to a single company, the Commercial Solvents Company, which operates a large manufacturing unit at Peoria in which is produced the solvents from the molasses shipped from New Orleans. It found that the reason advanced to justify the lower rate as a transit rate was not justified because it found no analogy between the inbound movement of molasses and the outbound movement of the solvents. The blackstrap was entirely destroyed at Peoria in the course of manufacture in the production of the solvents.

The commission expressed the view that the movement of the blackstrap having ended at Peoria the attempted refund provided in the tariff became an unreasonable practice and a violation of Section 2 of the Interstate Commerce Act. It held also that the rate of 17½ cents per 100 lb. although somewhat exceeding cost of service on the basis of operating expenses, was unnecessarily low and less than it cost the Commercial Solvents Company to transport the blackstrap in its own barges. An order was entered directing the cancellation of the tariffs which were held to be unlawful under both Sections 1 and 2 of the Interstate Commerce Act.[20]

Subsequently, the carriers sought authority to establish a rate of 17½ cents per 100 lb. from New Orleans and other Gulf ports to Peoria without the transit refund arrangements and without observing the long-and-short-haul requirements of the Interstate Commerce Act at intermediate points. The controlling reason for the reduction of the rate from 30 cents to 17½ cents was water competition. Cost studies were presented by the carriers in the prior case as well as in this one to show that the 17½-cent rate was reasonably compensatory. Full operating expenses, out-of-pocket expenses, and direct expenses were used as the bases for these studies. The conclusions from these studies were that the 17½-cent rate would yield revenues substantially equal to cost of service on a full-operating-expense basis, excluding the expense of handling non-revenue freight assignable to passenger traffic, and that the revenue per car would be substantially greater than out-of-pocket costs.

Testimony was introduced that the movement of the blackstrap would be handled in lots of several cars coupled together. The cars were handled on regularly scheduled trains in which only 30 to 40 per cent of the tonnage rating of the locomotives was used, so it was possible to absorb a substantial increase in the number of cars in these trains before providing additional ones.

Later Developments

The commission found that proposed rate to be justified under the circumstances and permitted the rate of 17½ cents per 100 lb. to go into effect and to maintain higher rates to, from and between intermediate points. The commission attached a provision that the intermediate rates should not be increased, except upon the authorization of the commission; that they should not exceed the lowest combination rates; and that the Fourth Section relief be limited to routes not more than 18 per cent longer than the direct routes between the same points, the length of the most circuitous route shown in the record.[21]

The next development in this interesting case occurred in 1939 when the railroads filed with the I. C. C. tariffs naming a rate of 14 cents per 100 lb.

[19] Order D-2945, Michigan Public Utilities Commission, June 24, 1935.

[20] ICC Docket No. 27250, *Blackstrap Molasses from Gulf Ports to Peoria, Ill.*, (219 ICC 695) 1937.

[21] Fourth Section Application o. 16,731, *Blackstrap Molasses to Peoria & Pekin, Ill.*, (223 ICC 221) 1937.

on blackstrap molasses in tank cars from New Orleans and Harvey, La., to Peoria and Pekin, Ill., subject to a minimum of 1,800 tons per consignment. This was equivalent to about 38 carloads. The existing rate of 17½ cents was continued for single carload shipments. No Fourth Section relief was sought. Upon protests of several shippers and the Mississippi Valley Association the tariffs were suspended by the commission. The case was set for argument upon merits as well as upon motion to vacate the suspension order.

The movement was essentially a plant-to-plant movement from the storage tank facilities of the Commercial Solvents Company at New Orleans and Harvey to its plant at Peoria. This plant is equipped with storage tanks and pipe lines for handling the traffic by barge, and adequate facilities for storage were available at Harvey and at Peoria so that the traffic could be handled in large lots either by barge or by railroad tank cars. The Commercial Solvents Company owned or leased tank barges and towboat facilities. Statements of cost of performing the service by tank barge were introduced, which the commission characterized as "only a rough approximation of the cost of barge transportation, based on unsatisfactory evidence," which consisted of 14.5 cents per 100 lb. for towing charges or 13.05 cents as cost after allowing 10 per cent profit, and 2.67 cents for other barge operating costs, a total of 15.72 cents per 100 lb.

Cost Estimates

Railroad witnesses testified that the movement would be handled in solid lots of 38 cars or more which would be added to existing freight trains which averaged 83 cars per train. Testimony was also introduced that switch engine time would be saved in comparison with that required to handle the traffic in single carload units. The empty tank cars returning from Peoria to Harvey would not be handled in solid trainload lots but in the same manner as other south-bound empty cars on available trains.

The estimates of cost of performing the service on a multiple-car basis submitted by the carriers were restated by the Bureau of Statistics of the Interstate Commerce Commission to supply what were considered to be omissions and a reduction in the average number of cars per train to take into consideration the average movement per train of 16 empty cars. This had the effect of producing an average train of 61 cars, loaded and empty. The entire northbound traffic was distributed over the average northbound trains operated per day to 71 cars per train. The restatement of these costs produced costs of handling the cars blocked into 38-car blocks of 7.46 cents per 100 lb. and of handling the same number of cars unblocked of 8.59 cents per 100 lb. To these figures were added the expenses of handling southbound empty cars, estimated as equivalent to 3.75 cents per 100 lb., producing a total round-trip expense per 100 lb. of 11.19 cents and of 12.32 cents respectively.[22]

"It will be observed from a review of [previous] . . . cases that our refusal to sanction trainload, multiple-car or quantity rates, when the quantities were greater than single carloads, was based upon a finding of unjust discrimination (using that term in a generic sense) in favor of large shippers. Unjust discrimination, however, is a question of fact. Economic, industrial and transportation conditions have materially changed since these cases were decided. In none of the above cases dealing with rates on quantities larger than a carload was it shown that the traffic in question moved in cargo quantities by water, or that the traffic in question had been diverted from common carrier railroad transportation to shippers by private barge transportation. The movement here involved is a plant-to-plant movement by a private barge which has been in successful operation for two or three years. What is here attempted is that the common carrier railroads, whose sole business is transportation, seek to resume the transportation service which they formerly rendered, and which for the past two years has been performed largely by the shipper for itself.

"It is well settled that differences in the quantities shipped as a single shipment may afford a fair and reasonable basis for differences in transportation rates. In railroad transportation, these differences are currently recognized as between carload, less-than-carload, and any-quantity rates. In truck transportation, in addition to truckload and less-than-truckload rates there are so-called volume rates. In connection with the latter there is no requirement as to loading in a single truck. . . . Numerous joint rail-barge rates are now subject to minimum weights ranging from 300 to 1,500 tons insofar as the barge portion of the movement is concerned. The barge lines generally publish and maintain rates applicable on cargo quantities on most of the commodities they handle. Pipe lines publish quantity rates."[23]

The commission found that there was nothing unlawful in the establishment of railroad rates on a quantity larger than a carload, when: (1) the traffic moved as a single shipment; (2) the rates were designed to meet competition from other modes of transportation whose unit of transportation is not limited to single carloads; and (3) when a just and reasonable relation between the rates on the larger and smaller consignments of the same traffic is preserved.

In this case, however, the commission found that the proposed reduction in rates was unlawful, because greater than necessary to meet competition, unreasonably low, and without just and reasonable relationship between the larger and smaller quantity rates.

The tariffs were ordered cancelled without prejudice to the establishment of a rate of 15 cents per 100 lb. subject to a minimum consignment of 1800 tons.[24]

An examination of the experience of the carriers and the regulatory history of multiple car or cargo lot freight rate seems to justify the following conclusions:

1. The commission will not disapprove such rates solely upon grounds of historic prejudice against large quantity rates.

2. Changes in economic conditions and the scale of industry have been noted by the commission in the more recent cases.

3. The rates must be conditioned upon movements at one time, on one bill of lading, from one shipper to one consignee.

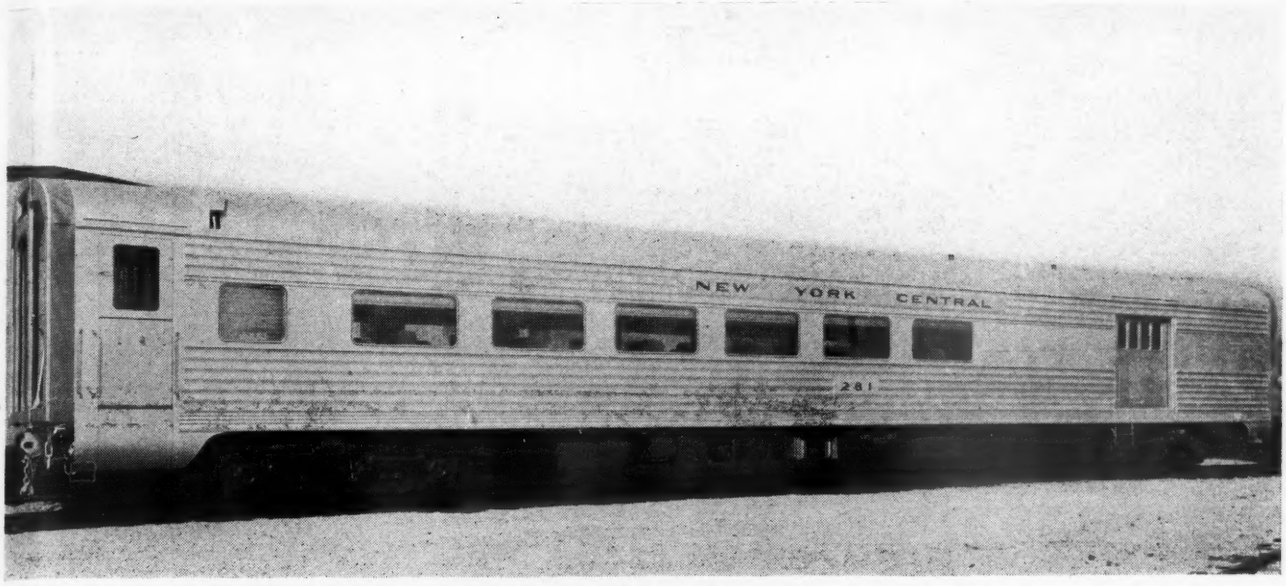
4. The rates must be justified by competition with other services where there are available rates applicable to equally large scale movements; and,

5. The multiple car or cargo quantity rates must be reasonably related to the single-car carload rates.

Mr. Eastman in a separate concurring opinion in the *Blackstrap Molasses Case* suggested that single-carload-lot shippers should be entitled to rates if they wished them not more than 10 per cent higher than the multiple-carload rates.[25] Multiple carload lot or cargo rates have been established upon a number of commodities in various ports of the United States so that they may no longer be considered a novelty. The commodities now include: blackstrap molasses, sand and gravel, coal, and bauxite ore. In the period which we have now entered, it is probable that great emphasis will be placed upon intercarrier, producer and market competition, and it appears not unlikely that the establishment of this type of wholesale rates may receive greater attention by carriers and shippers.

[22] I. and S. Docket No. 4645, *Molasses From New Orleans to Peoria and Pekin*, (235 ICC 485, 1939, Appendix pp. 509-510.
[23] (235 ICC 485, 498-499), 1939.
[24] (235 ICC 485, 502), 1939.
[25] (235 ICC 485, 504), 1939.

A page from the Burlington's booklet, "Let's Take a Look at Ourselves." The pamphlet portrays, cartoon-fashion, many of the findings of the latest Opinion Research survey to learn what the public really thinks about railroads and railroad people



One of 20 coach-baggage cars recently delivered to the New York Central by the American Car & Foundry Co.

New York Central Installs 20 Aluminum Alloy Combination Baggage Cars

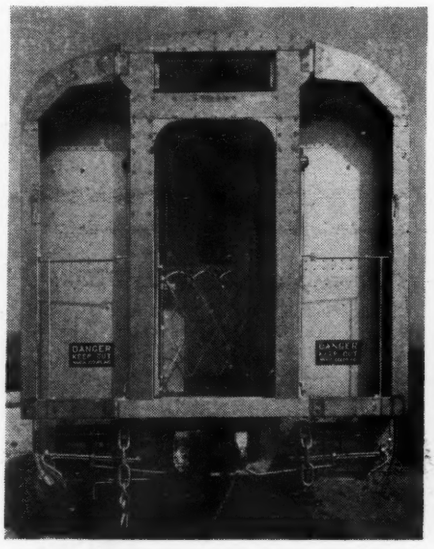
Built by American Car & Foundry Co., each car weighs 116,100 lb., seats 48, and carries 18,000 lb. of baggage in 29-ft. compartment

DURING February and March the New York Central System received from the American Car & Foundry Co. 20 lightweight streamlined coach-baggage cars. These cars were built at the St. Charles, Mo., plant. The structural materials were principally strong aluminum alloys.

The cars are 85 ft. over coupler pulling faces, 16 ft. over side posts, and the roofs are 13 ft. 6 in. above the rail. The passenger compartment is 43 ft. 4½ in. long and the baggage room 29 ft. long. By the use of aluminum alloys the basic weights will represent a saving of approximately 34 per cent in comparison with equivalent cars of conventional heavy-steel construction. The weight of a car complete is 116,100 lb. The cars were designed especially to meet the operating requirements of the New York Central. The interior was styled by Henry Dreyfuss.

The Interiors

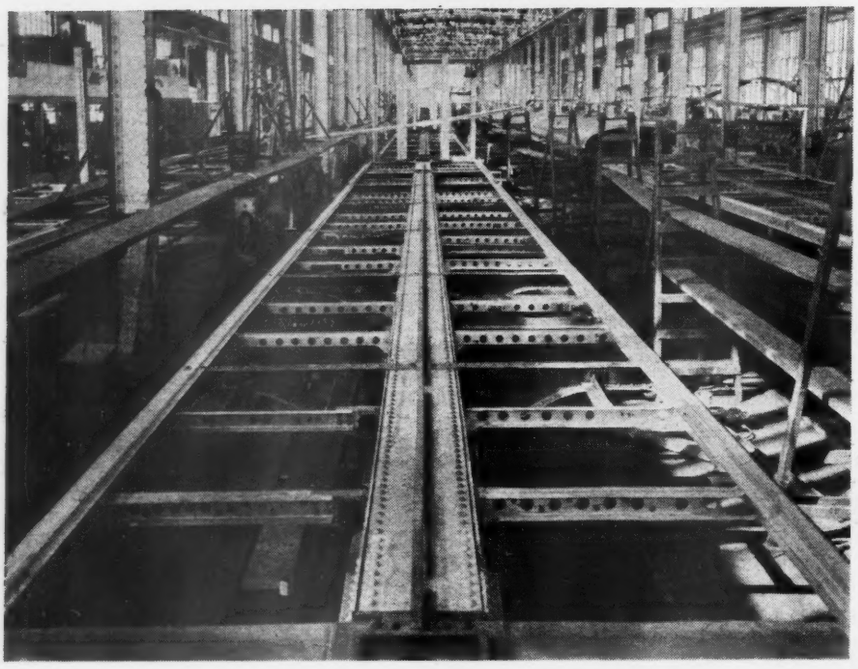
The color treatment of the interior is in browns and blues, accented with rust. The ceiling is a light brown with a darker tone on the central strip and air diffusing louvers. The darker tone is repeated on the baggage racks and frieze panel. Blues are employed on the pier panels, for the upholstery, and on the floor under the seats. The pier panels are of a light shade. The seat and back cushion upholstery is in two tones of blue in wide, horizontal stripes. The darker tone, somewhat deeper than the pier panels, is applied solid on the back of the seats. Under the seats the floor is covered with blue jaspe linoleum. The background of the aisle strip is tan jaspe on which is an inlaid pattern in white. Rust linoleum covers the wainscoting on the sides of the cars and all bulkheads, locker fronts, and toilet partitions—an attractive feature from the standpoint of maintenance. The window shades have a brown background striped in rust.



The train contour between cars is made continuous by outer diaphragms

Two pictures are located one on each side of the car at the partition bulkhead. These depict scenes of early American life relating to the district served by the New York Central.

All interior finish is so designed as to eliminate exposed screw heads and battens. The ceiling is a new departure, being a full floating type and blending harmoniously with the central air diffuser, which is selected to give an even flow of filtered air of the proper temperature. Large, roomy luggage racks



Underframe of the New York Central coach baggage car

are applied on the frieze. Recessed in the bottoms of the supporting brackets are individually controlled reading lights at all seats.

There are 24 double seats, seating 48 people. There seats are full reclining and rotating, with individual, adjustable foot rests. Seats are luxuriously upholstered and spaced for ample leg room and correct vision relative to the large full view windows.

The baggage compartment is finished in flat sheets with buff colored walls and white ceiling. It is heated by a unit heater having a steam coil and blower fan unit placed overhead, above the end door. It is equipped with letter case, desk, etc., according to standards of the railroad.

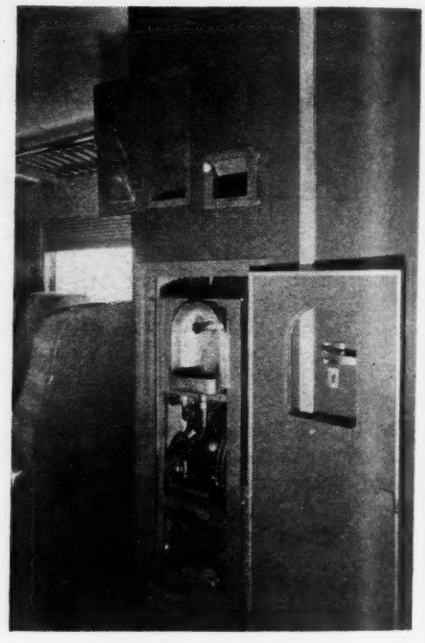
The exterior embodies American Car & Foundry anodized aluminum fluted extrusions and snap-on moldings above and below the windows, the flutings having a satin finish, except that one molding at the side plate, one directly above and below the windows, and one at the side sill, are given a bright polished mirror finish. The deadlight panels also have a satin finish. The four lines of bright molding give a pleasing contrast to the duller satin finish. An effective means of closing the ends of the flutings at the doorways and ends of the car was achieved by the use of anodized satin-finish castings which follow the contour of the moldings. The ends and roofs were painted with Alcoa Albron aluminum lacquer which blends with the anodized sides.

How the Cars Are Built

One feature which should not be overlooked is the short fluted skirt that flares down at the ends of the car to conceal the step sides. It is so applied with concealed bolts that, in case of damage, removal and replacement entirely from the exterior of the car are possible without disturbing any other parts.

The cars were designed to meet the U. S. Post Office, as well as Association of American Railroads, specifications for the construction of new passenger equipment. All materials used on the car-body framing are aluminum alloys, with the exception of bolsters, crossbearers and end sills, which are low-alloy high-strength steel. The combined steel buffer casting and draft-gear pocket extends through the bolster and is secured to the center sills by riveting. The joint is protected against corrosion by hot zinc metalizing. Special extruded aluminum-alloy sections are used for many of the framing members.

The center sills are of built-up aluminum alloy. They are 16⅛ in. deep from the top of the cover plate to the bottom of the angle. The construction



Electric water cooler

The truck

includes a 15-in. by ⅜-in. top cover plate, 4-in. by 3-in. by ⅜-in. top angle, 7/16-in. webs, and 6-in. by 4-in. by 9/16-in. bottom angles.

The bolsters are low-alloy high-strength steel of built-up welded construction, having a 20-in. by ⅜-in. top cover plate, a 16-in. by ½-in. bottom cover plate, and ¼-in. webs. The crossbearers are also of low-alloy high-strength steel of welded construction built up of top and bottom cover plates and 3/16-in. pressed diaphragms. The floor beams are aluminum-alloy pressed pans.

The side frames are of girder construction. The side sills consist of two

members of special extruded aluminum sections. The member which is assembled with the underframe has a vertical web to which the side posts are attached and integral flanges for supporting the floor. The member which is assembled with the sides is a 2½-in. by 2-in. by ¼-in. aluminum angle and, in turn, is riveted to the extruded underframe member.

The side plates are 2½-in. by 2½-in. by ¼-in. and 4-in. by 2½-in. by ¼-in. aluminum angles riveted together. The side posts are 3-in. aluminum-alloy Z-shape extrusions. The belt-rail construction includes an extruded aluminum-alloy channel applied between and secured to the posts and a continuous inside bar.

The side sheets, letterboards, and pier panels are No. 10 B. & S. gage aluminum alloy. The rivets which are not covered by the fluting have an anodized, low oval head of special design.

The end frame construction includes two 8-in. aluminum-alloy step-extruded I-beam sections with a web thickness in the lower portion to meet A.A.R. shear resistance requirements. These extend into pockets in the buffer casting and likewise are supported at the top by anti-telescoping construction consisting of a 10-in. aluminum-alloy channel at the stub end and a truss girder construction at the vestibule end. The intermediate end posts are 3-in. aluminum-alloy Z-shapes and the corner posts are special extruded aluminum sections.

The roof is constructed of 3-in. aluminum-alloy extruded Z-section carlines with five lines of extruded Z-section purlines. The roof sheets are of aluminum alloy secured to the framing with aluminum mushroom-head rivets.

The longitudinal floor stringers are of low-alloy-high-strength steel supported on the underframe crossmembers. Keystone floor sheets ⅝ in. high are applied to the longitudinal stringers. Composition flooring is applied to a thickness of 5/16 in. above the keystone. A No. 16 B. & S. gage galvanized false floor is applied to the bottom of the floor stringers; it extends to and is secured to the side-sill extrusion and center-sill top cover.

Insulation

The inside of all outside sheets and the outside of the inside sheets are sprayed with Insulmat. Insulation 3 in. thick is secured in place with wires in the floor, sides, ends, and roof of the car. Tape is used to break the metal contact between the framing members and the inside finish.

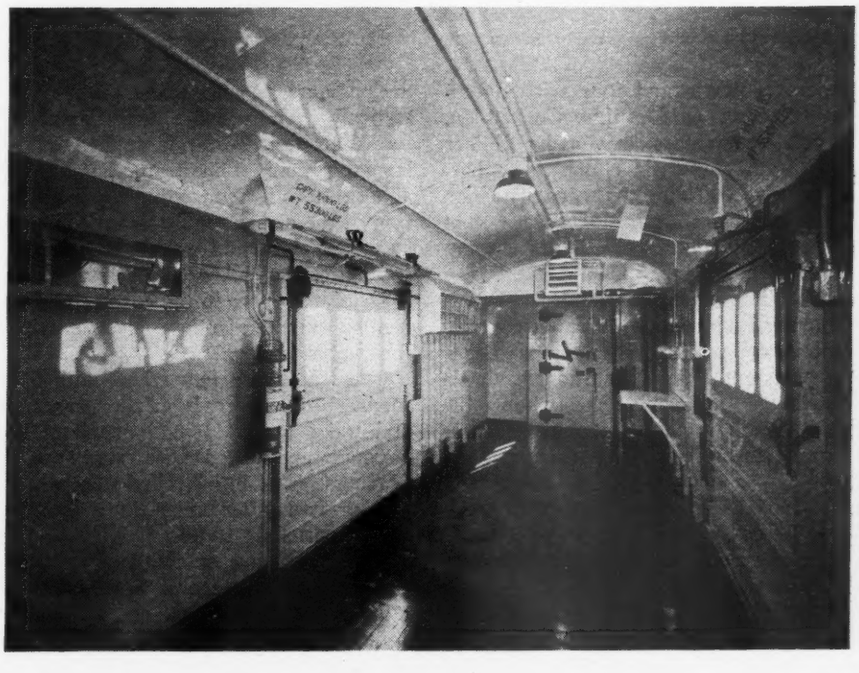
Both ends of the cars are equipped with end outer closures, inner diaphragms, end curtains, and end gates. The end closures are of stainless steel and have sheet rubber following the outside car contour and forming continuous surfaces when the cars are coupled. The outside wings of the closure are hinged to the center section which is supported by suspension rods from the car body; the face plates are held in contact by coil and semi-elliptic springs.

The trap doors are of aluminum with stainless-steel super-diamond floor plates, operating in conjunction with the folding steps of aluminum and stainless steel, with four Kass step treads. When closed the steps form a continuous part of the skirting.

New York Air Brake Company's Schedule HSC electro-pneumatic brakes with D-22 control valves and speed governors are installed. Each truck is equipped with two brake cylinders and Simplex clasp brakes. One National Brake Company's lever-type hand brake is applied at each end of the car.

Tight-lock couplers are used with Waughmat rubber draft gears.

Sixteen of the cars are equipped with



Above—The interiors are decorated in browns and blues and rust. Below—Looking toward the outside end door of the baggage room

Partial List of Materials and Equipment on the New York Central Coach-Baggage Cars

Aluminum shapes, plates, sheets, castings and outside flutings	Alminum Co. of America, Pittsburgh, Pa.
Alumiliting	Stolle Corp., Sydney, Ohio
Truck frames and bolsters, cast-steel; buffer castings	General Steel Castings Corp., Eddystone, Pa.
Wheels	American Rolling Mill Co., Middletown, Ohio
Springs	Crucible Steel Co. of America, New York
Axles	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Upper buffer mechanism	Standard Railway Equipment Manufacturing Co., Hammond, Ind.
Draft gear	Waugh Equipment Co., New York
Couplers and yokes	National Malleable & Steel Castings Co., Cleveland, Ohio
Bolster locking center pin; side bearings	W. H. Miner, Inc., Chicago
Shock absorbers	Houde Engineering Division of Houdaille-Hershey Corp., Buffalo, N. Y.
Roller-bearing wheel units	Hyatt Bearings Div., General Motors Corp., Harrison, N. J.
Electro-pneumatic brakes	New York Air Brake Co., Watertown, N. Y.
Simplex clasp brakes	American Steel Foundries, Chicago
Hand brakes	National Brake Co., New York
Brake shoes	American Brake Shoe Co., New York
Sound-deadening material	J. W. Mortell Co., Kankakee, Ill.
Sound-deadening pads	Fabreeka Products Co., Boston, Mass. United States Rubber Co., New York
Fiberglas insulation	Gustin-Bacon Mfg. Co., Kansas City, Mo.
Diaphragm rubber	B. F. Goodrich Co., Akron, Ohio
Diaphragm; vestibule curtains; step treads	Morton Mfg. Co., Chicago
Trap-door floor plates	Alan Wood Steel Co., Conshohocken, Pa.
Trap doors	O. M. Edwards Co., Syracuse, N. Y.
Composition flooring	Tuco Products Corp., New York
Keystone floor	American Car & Foundry Co., New York
Plymetl	Haskelite Manufacturing Corp., Chicago
Masonite	Masonite Corp., Chicago
Floor covering and wall separation, linoleum	Armstrong Cork Co., Lancaster, Pa.
Sash	Adams & Westlake Co., Elkhart, Ind.
Glass	Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Pressed prism safety glass	Pressed Prism Plate Glass Co., Chicago
Doors, interior	American Car & Foundry Co., New York Haskelite Manufacturing Corp., Chicago
End door locks	Dayton Manufacturing Co., Dayton, Ohio
Door closers	Russell & Erwin Mfg. Co., New Britain, Conn.
Side-door hangers	Midland Co., South Milwaukee, Wis.
Window curtains	Adams & Westlake Co., Elkhart, Ind.
Formica	Formica Insulation Co., Cincinnati, Ohio
Seats	Transportation Seat Co., Chicago
Interior styling	Henry Dreyfuss, New York
Photomurals	Raymond & Raymond, Inc., New York
Parcel racks	Dayton Manufacturing Co., Dayton, Ohio
Drinking-water cooler	E. A. Lundy, Inc., New York
Cup dispensers	Paper Cup Div., U. S. Envelope Co., Worcester, Mass.
Lavatories	Crane Co., Chicago
Flush hoppers	Dayton Manufacturing Co., Dayton, Ohio
Copper pipe and fittings	Mueller Brass Co., Port Huron, Mich.
Towel dispenser	A. P. W. Paper Co., Albany, N. Y.
Razor invertor	Electronic Laboratories, Inc., Indianapolis, Ind.
Tanks	Scaife Co., Oakmont, Pa.
Paint, interior, exterior roof and ends	E. I. du Pont de Nemours & Co., St. Louis, Mo.
Fire extinguishers	American-LaFrance-Foamite Corp., Elmira, N. Y.
Batteries	Gould Storage Battery Corp., Depew, N. Y.
Charging receptacles	Pyle-National Co., Chicago
Axle-lighting equipment (16) (4)	General Electric Co., Schenectady, N. Y. Safety Car Heating & Lighting Co., New York
Generator drive	Spicer Manufacturing Corp., Toledo, Ohio
Lighting fixtures	Luminator, Inc., Chicago Safety Car Heating & Lighting Co., New York
Air-conditioning equipment	Frigidaire Div., General Motors Corp., Dayton, Ohio
Air diffusers	E. A. Lundy, Inc., New York
Exhaust fans	Diehl Mfg. Co., Somerville, N. J.
Exhaust ventilators	Railway Utility Co., Chicago
Uni-Flo grilles	Barber-Colman Co., Rockford, Ill.
Air-conditioning and steam-pipe insulation	Johns-Manville, New York
Heating equipment and air-conditioning controls	Vapor Car Heating Co., Chicago

General Electric and four with Safety Car Heating & Lighting Co. 20-kw. 80-volt genemotors driven by Spicer drive with automatic clutch. The batteries have 600 amp. hr. capacity. The lighting fixtures are incandescent except for the baggage-rack lights which are 64 volt d.c. fluorescent.

Frigidaire electro-mechanical air-conditioning equipment with Vapor controls supplies conditioned air to the passenger compartment. The conditioned air is distributed uniformly throughout the car through a continuous air diffuser running the full length of the compartment.

Provision has been made for future installation of telephone and radio equipment not presently available.

Vapor heating equipment includes heat-tempering coils in the air-conditioning unit and unit fin-type floor heat in the passenger compartment, all thermostatically controlled. An overhead forced-air unit heater is applied in the baggage room. This heater has adjustable shutters for conrolling the distribution of the air. Flexible steam conduits, steam couplers, and wash-water heating specialties are all of Vapor type.

Drinking-water in the coach compartment is supplied from an electric drinking water cooler.

The trucks are four-wheel with 5½-in. by 10-in. journals at the passenger end and 6-in. by 11-in. journals at the baggage end, fitted with Hyatt roller bearings. The 36-in. rolled-steel wheels are ground after mounting, insuring truly concentric treads.

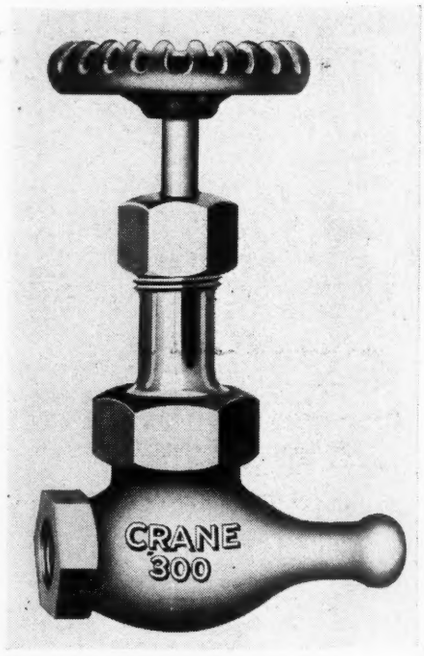
The trucks are of single drop equalizer type, with General Steel Castings alloy-cast-steel frames on which the pedestals are cast integral. Both equalizer and bolster springs are of helical coils.

Sound-deadening materials are used to isolate noises completely from the car body, principally at the bolster springs, truck center plates, and body side bearings. They are also applied to the moving parts of the coupler and buffer mechanism.

Cab-Hose Valve

A cab-hose valve specially designed for locomotive service has been announced by the Crane Company, 836 South Michigan avenue, Chicago. Known as the No. 1878P valve, it is a 300-lb. brass globe valve with a plug-type disk. It is not an A. A. R. valve but is patterned after the A. A. R. 300-lb. inside-screw brass valves, and all of its parts except the bodies are interchangeable with corresponding parts of the A. A. R. valve.

Two sizes are available, one with a ⅜-in. inlet and one with a ½-in. inlet. Both sizes have a hose-end outlet for ½-in. hose. Replacement parts for standard ⅜-in. valves are used for the unit with the ⅜-in. inlet. The replacement parts for the ½-in. inlet unit are those for standard ½-in. valves.



Crane No. 1878P cab-hose valve

The bonnet is made of a special wear-resisting bronze. Crane special brass is used for the body and the union bonnet ring. The plug-type disc is made of Monel metal and is spun onto the stem. The body seat ring is made of Exelloy.

Reviews Estimates of Postwar Expenditures

I. C. C. Bureau of Transport Economics and Statistics issues last study of series on transportation outlook

THE Interstate Commerce Commission has made public a study of "Postwar Capital Expenditures of the Railroads," which was prepared in its Bureau of Transport Economics and Statistics on the basis of returns to a "statistical series circular" sent out to Class I line-haul carriers in April, 1945. The summary figures showing that the reporting companies expected to make gross capital expenditures aggregating $1,635,621,257 "in the three years following VJ-Day" were released previously, in the December 10, 1945, issue of the bureau's "Monthly Comment," as noted in the *Railway Age* of December 15, 1945, page 1000.

Moreover, later estimates have since been received by the bureau, which reported in the most recent issue of the "Comment" that the 1947 expenditures of the Class I roads (with returns from 10 roads missing) were expected to total $944,246,860, as compared with actual 1946 expenditures by the same roads of $527,884,501 (see *Railway Age* of April 12, page 755). Estimates analyzed in the study indicated that the gross capital expenditures for the first postwar year, which turned out to be 1946, would total $624,575,572; and that the outlay for the second postwar year would be $534,388,887.

Last of Series

The study, Statement No. 471 of the bureau, is a document of 75 mimeographed sheets, which was issued with the usual disclaimer to the effect that it "has not been considered or adopted" by the commission. It was prepared under the supervision of the bureau's chief carrier research analyst, C. S. Morgan, by two members of the staff—John T. Warren and Alexis P. Bukovsky. The foreword by Bureau Director W. H. S. Stevens identifies the study as "the last of a series of analyses of postwar transportation undertaken from one to two years before the end of the war." Previous reports of the series have included "Postwar Traffic Levels"; "Postwar Earnings of Class I Railways"; and "Regional Shifts in the Postwar Traffic of Class I Railways."

The report pointed out that most of the returns were prepared before the war in Europe ceased on May 8, 1945, and thus the date used marking the beginning of the postwar period varied in accordance with the individual judgments of the carriers. "It may be inferred," the report continued, "that most carriers did not foresee that the war with Japan would come to an end at as early a date as it did and that the forecasts in most instances involved looking ahead a maximum of approximately four years."

The carriers were asked to set out their estimates by primary road and equipment accounts, and to provide an "approximate" division of the total expenditures between the first, second, and third postwar years. They were also asked to assume that their average annual net railway operating income in the three years would equal the $998 million reported for 1941—"unless they considered some other basis more appropriate." The report found that most of the reporting roads seemed to have used that assumption, while the few which did not generally used a lower basis. In 1946, the first full postwar year, the net railway operating income of the Class I roads was only $619 million.

The summary figures shown in the report are set out in the accompanying table, where the Pocahontas region is included in the Southern district, as it is in all of the report's calculations. After presenting those figures the report recalled that the bureau's "Postwar Earnings of Class I Railways" had estimated that "private gross capital formation" in the same three-year period would total $92 billions. "The [railroads'] $1.6 billions," it added, "would represent 1.8 per cent of this total. This contribution is relatively smaller than the one which the railroads made in 1927-1929, when they contributed about 5.5 per cent of the total."

The report's analysis of the prospective expenditures by accounts indicated that $881,529,755, or 53.9 per cent of the three-year total, would be spent for equipment, and $754,091,502, or 46.1 per cent, for fixed property. The "contrast" between the Southern district and the other two districts struck the report's authors as the "most interesting feature" of this analysis. "Nearly 58 per cent of the proposed expenditures are for road items in the Southern district and over 42 per cent for equipment," they noted. "In both the Eastern and Western districts, these proportions are almost exactly reversed."

Aim at Higher Speeds

Later on the report said that a study of the projects indicated that "in general" most of the proposed improvements "are those tending to reduce operating expenses and to improve service by permitting higher overall speeds." In that connection it mentioned "numerous" projects which involve strengthening of roadbed and bridges, grade reductions, heavier rail, signaling equipment, and "other improvements."

"A study of the proposed capital expenditures," the report continued, "reveals an intention on the part of the railroads to meet competition in the postwar period with faster and otherwise more attractive service. An unprecedented outlay for passenger-train cars apparently indicates a definite intention to hold as much passenger business as possible in the postwar era. Whether or not these proposed expenditures will improve the railroads' position with respect to their competitors will depend upon a variety of conditions, including efforts of competitors to improve their own position, as well as on government policy with regard to transportation."

Meanwhile, the report had looked into the relationship between net railway operating income and expenditures for additions and betterments, setting up in that respect annual figures for the period from 1920 through 1945. While attention is called to the fact that the percentage relationship of expenditures to

Estimated gross capital expenditures of Class I line-haul railways in three years following VJ-Day, by years and districts

Year	District: Eastern	Southern	Western	United States
First:				
Amount	$250,157,243	$113,787,632	$260,630,697	$624,575,572
Per cent	36.4	36.7	40.8	38.2
Second:				
Amount	$237,928,684	$102,270,130	$194,190,073	$534,388,887
Per cent	34.7	33.0	30.4	32.7
Third:				
Amount	$198,624,648	$94,286,251	$183,745,899	$476,656,798
Per cent	28.9	30.3	28.8	29.1
Three years:				
Amount	$686,710,575	$310,344,013	$638,566,669	$1,635,621,257
Per cent	100.0	100.0	100.0	100.0

net was "relatively low" during the depression period of the Thirties, the report's general finding was that "there is no percentage relationship between the two factors which may be regarded as **'normal'."**

As to the financing, the returns indicated that 62.6 per cent of the projected expenditures would come out of earnings of the years in which the expenditures were made; and 29.7 per cent would involve "incurrence of indebtedness." No financing by stock issues was contemplated, while accumulated earnings of the past were expected to provide for only about 7.7 per cent of the estimated outlays. In the latter connection, the report observed that, prior to the end of the war, "some believed that the strengthened position of the carriers would afford the means with which to finance a comprehensive modernization program."

"The estimates brought together in this study," it added, "would not indicate that such a program of expenditures will be realized. More recent developments, however, show an upward trend in expenditures and the views expressed during the war may be fully realized. Carriers' 1945 plans to make small use of past accumulations may signify that these reserves would be used for capital expenditures if current earnings did not suffice for this purpose, or that they would be used when postwar modernization programs have more fully matured, as they now apparently are in some respects. The inference is possible, on the other hand, that carriers felt that they must retain these reserves substantially intact for possible contingencies in the early postwar period."

The study's comment on the entire absence of financing through the issuance of capital stock noted that "only negligible amounts" of stock have been issued by railroads in recent years to finance additions and betterments. "The low interest rates that now prevail and the leverage advantage they confer on present holders of common stock supply only part of the answer," it continued. "The large use that has been made of current earnings in the recent past and that was contemplated in carriers' plans for the three postwar years is indicative, in part, of carriers' inability to float stock issues on a satisfactory basis. It may be noted in this connection that no-par stock, the issuance of which is subject to fewer restrictions of state laws than that of stock having a par value, has increased greatly in importance over a period of years."

Skid-Rol dollies being removed after completed loading operation

All-Purpose Dollies

New "Skid-Rol" dollies manufactured by Techtmann Industries, 714 West Wisconsin ave., Milwaukee 1, Wis., are designed for moving heavy machinery boxes or crates. The dollies, which are used in pairs, measure 18½ in. by 10¾ in. by 4 in. high. They are equipped with four all-steel rollers 3¾ in. in diameter and are said to have a load capacity of more than 10 tons. As a safety factor, these dollies have steel cleats said to prevent slipping.

Ross Introduces New Type Lift Truck

A 2½-ton capacity, gasoline-powered lift truck, identified as the Series 5, has been announced by the Ross Carrier Company, Benton Harbor, Mich. Equipped with twin hoist units, the truck is said to have a hoisting speed of 45 ft. per min. either up or down. Down speeds are said to be automatically governed to safe limits regardless of load limits. Tilt angles of the unit are 6 deg. forward and 12 deg. backward. Its steering-column gear shift, twin hoists and tilt cylinders are controlled by a single lever.

The truck, which is mounted on three interchangeable pneumatic-tired cast-steel wheels, has three speeds forward and three reverse, and is said to be able to achieve speeds up to 18 m.p.h. Better load vision for the operator, through a new design of tower where neither cylinders nor chains obstruct his view, is said to assure safer operation. Weighing approximately 6,000 lb., the unit has a standard lifting height of 9 ft. It is provided with oversize, foot-pedal-operated hydraulic brakes, as well as a hand-lever parking brake. The series 5 truck is powered by a 25-hp. four-cylinder, four-cycle engine and is equipped with a standard truck-type single-plate clutch and spiral bevel full-floating type drive axle. It has standard adjustable forks; other type forks may be ordered at the option of the purchaser.

The Series 5 lift truck

Tackle $100,000,000 Claims Account

(Continued from page 838)

declared. There is strong public demand for greatly improved railroad facilities and service. At the same time there is considerable accrued obsolescence and wear-and-tear and a need for heavy expenditures to maintain and renew the plant and equipment.

The answer to this problem is greater net with which to build up the railroad plant to produce the type of transportation the public seeks.

Prevention Committee Report

The report of the National Committee on Prevention of Loss and Damage commended the achievements of the Shippers' Advisory Boards, currently conducting their eleventh annual "Perfect Shipping Month," and suggested that, in this connection, they emphasize better marking. "Marking failures," the report stated, "have long been recognized as the most irritating and least excusable of all transportation failures, and is a matter wholly in the hands of the shipper." Proper and complete marking will largely eliminate losses of entire packages.

The aid of the advisory boards also can well be directed toward guidance of new or expanding industries, the report said. The production of milo and other sorghum grains, for example, is increasing and should be watched closely to see that good practices, particularly with reference to weighing, are initiated.

The committee asserted that the carriers would continue their better handling campaigns, stressing both careful handling and proper loading, realizing that the benefits of even the best of containers could be offset by inefficient stowage.

There has been some reduction in unnecessary handling of l.c.l. cars at transfer points, it was slated. In this connection, C. Woods, superintendent of station operations of the Central of Georgia, reported that his line had made exhaustive studies to determine the most practical break-bulk points and minimize handling, and, in spite of orders requiring heavy car loading had been able to effect considerable reduction in station costs and claims arising from such additional handling. He urged that connecting lines cooperate in this respect.

The protection afforded by bulkheads and horizontal gates is considered most desirable and considering the extensive loss and damage to l.c.l. freight and recognizing that the present Office of Defense Transportation heavy loading requirements will doubtless obtain for some time, the committee resolved, that the use of bulkheads "should be universally adopted and plans agreed upon for their prompt return to the owning lines. The lack of some such plan has seriously interfered with a more general use of this protection."

Several member lines reported the use in connection with merchandise cars of a form which is completed by destination station and forwarded back to origin agent showing condition of lading and exceptions noted. The committee considered this an excellent method for correcting bad conditions on interline cars because it fixes the responsibility for faulty handling at origins and permits corrective action to be taken, and contains information on "overs and shorts" of value in tracing and matching shipments. Adoption of such a form would appear most justifiable, particularly in view of the number of member roads testifying that "overs and shorts" from connections now constitute a major problem at freight stations, it was observed.

The report stressed the value of the local freight agents in prevention work, recommending the practice of including them on mailing lists and having them present at meetings, stating that it is a good practice because "the agent represents all branches of the service, and all freight handling begins and ends with the agent," and that the agent cannot be expected "to generate ideas of helpful things he can do unless he is kept posted."

The division and some individual carriers have experimented with the "unitized" glued method of loading fiberboard containers, and several breweries have successfully produced "tight" loading with glued cases of pints, it was reported.

Effect of Vertical Oscillation

A campaign to reduce claims on furniture, (which accounted for 7.2 per cent of the total claim bill in 1946) was conducted during September, 1946. Educational material was put out to all concerned. Inspectors who had been appointed to work with furniture shippers in certain areas have now been augmented by "furniture men" for Central West territory and North Pacific and South Pacific territory.

In discussing "Unlocated Damage, Concealed Damage and Improper Handling of Cars," to which 69.7 percent of the entire loss and damage account was attributable, the committee pointed to vertical oscillation as a principal cause, because it disintegrates proper loadings, making then vulnerable to shocks of regular car handling. The committee recommended:

(1) That "all new closed cars, including refrigerator cars, and all rehabilitated and general repair cars, be equipped with an approved form of non-harmonic springs, of such a type and performance as will insure the proper protection of lading;"

(2) "That a definite program be instituted that will insure periodical inspection of all such non-harmonic springs, special trucks, and likewise draft gears, and provide repairs or replacements when necessary thereto. The weakness in the present use of such springs is the definite lack of proper inspection, with the result that many cars, so equipped at present, are moving with springs defective, which does not provide protection, even to the extent present when cars are equipped with only the conventional type of springs;"

(3) "That this program, in addition to attention by the railroads, be likewise fostered with and by the private car line owners."

Prevention Personnel Added

Since the last annual meeting in 1944 and particularly since the war, many individual roads have found it expedient to augment their prevention forces, chiefly through the addition of transportation inspectors. O. J. Wullstein, general freight claim agent of the Union Pacific, asserted that, while the shipper must prepare shipments for transportation, it is the carriers' obligation to aid him in every way possible. In illustration, he cited the employment of a skilled container engineer (see *Railway Age* of March 8, page 500) who had proved highly successful on his road, and urged that other carriers consider the merit of engaging such specialists.

Where prevention men were not already under the jurisdiction of the operating department, desirable results were achieved in effecting such a transfer, particularly with respect to enlisting the cooperation of yardmasters and yard forces in the reduction of rough handling, it was stated. Several roads have equipped transportation inspectors with cameras and report that photographic evidence of the condition of cars and shipments arriving in bad order had proved most helpful in "bringing home" to the guilty party the importance of proper stowage.

Election of Officers

The following were elected to offices of the division for the ensuing term: Chairman, J. M. Heath, freight claim agent of the Lehigh Valley, New York; First vice-chairman, G. W. Loderhose, freight claim agent of the Chicago, Milwaukee, St. Paul & Pacific, Chicago; and second vice-chairman, J. L. Walker, freight claim agent of the Seaboard Air Line, Norfolk, Va.

GENERAL NEWS

T.P.&W.-Unions Sign Accord, End Strike

Resume operation on April 21; 300 employees back to work after 18-mo. walkout

The prolonged strike difficulties of the Toledo, Peoria & Western were ended on April 22, with the signing of a working agreement at Peoria, Ill., between the road's management and 13 striking brotherhoods. On the previous day, at 12:01 a.m., on the basis of a tentative agreement already formulated, approximately 300 employees returned to their jobs and prepared to place the line in full-scale operation for the first time since October 1, 1945. (Details of the strike were outlined in the *Railway Age* of March 15, page 535.)

Coincident with the strike settlement was the lifting of an embargo on all traffic to and via the T. P. & W., one of the longest ever placed on railroad traffic, issued on September 28, 1945.

The agreement came 41 days after the still unsolved assassination of the T. P. & W.'s late president, George P. McNear, Jr. Negotiations for the settlement began on April 3. The T. P. & W. management, now consisting of executors and trustees as provided by Mr. McNear's will (see *Railway Age* of March 22, page 624), was represented by George Christensen, a member of the law firm of Winston, Strawn & Shaw, of Chicago. Pending an election of officers, Bruce Gifford, superintendent of the road, is in charge of the T. P. & W. operations.

Mr. Christensen said that the principal issues settled in the dispute were as follows: that no former employee will be excluded from re-employment by reason of alleged participation in violence during the strike; that road crews will perform, without additional compensation, switching operations at each end of the line up to one hour per day within an 8-hour day, even though they have traveled more than 100 mi. in road service; and that road crews will, at certain locations in Peoria, set out cars without penalty pay.

It was also agreed that the railroad would place into effect the rates of pay, rules and working conditions in effect on the line on September 30, 1945, modified as described, and including the national wage increase of April-May, 1946, and the national vacation agreements and supplements thereto.

A portion of the agreement relative to claims as a result of the strike reads, in part: "The parties have and do hereby waive and release any and all claims for themselves and on behalf of their members for or because of any matter done, committed or failed to be done or committed in connection with the said strike, including but not limited to any claims by the railroad against labor organizations or any of the members of the labor organizations for failure to perform services or for damage to the property or personnel of the railroad and any claims on behalf of any of the members of the labor organizations for damages, back pay or opportunity to render service."

The unions with which the settlement was reached are: Brotherhood of Locomotive Firemen & Enginemen; Brotherhood of Railroad Trainmen; Order of Railroad Telegraphers; Brotherhood of Railway Signalmen of America; Brotherhood of Railway & Steamship Clerks; American Train Dispatchers Association; Brotherhood of Maintenance of Way Employees; International Brotherhood of Electrical Workers; Brotherhood of Railway Carmen of America; International Association of Machinists; International Brotherhood of Boilermakers; International Brotherhood of Sheet Metal Workers; and the International Brotherhood of Firemen, Oilers, Helpers, Roundhouse & Railway Shop Laborers.

To Resume Lincoln Case October 1

The 47 Western railroads which are defendants in a Government anti-trust suit were granted by the federal district court at Lincoln, Neb., until October 1 to file objections to the evidence submitted by the government and to make such motions as they see fit. The Department of Justice entered 809 documentary exhibits in evidence during the one-day resumption of the trial on April 23.

March Ton-Miles

The volume of freight traffic handled by Class I railroads in March amounted to 55 billion ton-miles, an increase of 5 per cent above the corresponding 1946 month, according to a preliminary estimate by the Association of American Railroads. The March freight traffic this year was more than twice that of the same month in 1939.

The accompanying table summarizes preliminary ton-mile statistics for the first quarter of 1947 and 1946:

	1947	1946	Per cent increase
January	53,294,374	48,225,789	10.5
February	*a* 48,250,000	45,089,938	7.0
March	*b* 55,000,000	52,392,340	5.0

a Revised.
b Preliminary estimate.

See Steady Freight Business for RRs

Conference Board Sums Up Views of Business Men on Postwar Prospects

Railroads will continue to carry about the same proportion of the nation's freight in the postwar period as before the war, although there will be some shifts in the types of freight they carry, in the opinion of leading business executives recently surveyed by the National Industrial Conference Board. Some changes in established transportation procedures are considered likely to become permanent features of the postwar transportation pattern. They are: increasing use of motor carriers for short hauls; the virtual cessation of domestic water transportation by some industries; and a growing reliance on airlines for the movement of repair parts and small shipments. Wartime experiences also resulted in some modifications of packaging and methods of in-plant handling of materials.

While changes have occurred in relative costs of the various types of transportation services, executives report that other factors such as availability of facilities, speed of shipment, reliability of service and efficiency often outweigh cost considerations in the selection of a particular form of transportation for goods and personnel.

Many executives characterize the transportation situation as being much more acute today than during the war, and state that the immediate need in the industry is for more and better equipment, particularly for the railroads. Some executives cited instances where plant operations had to be curtailed because of a shortage of freight cars. Heavier loading of cars, necessary under wartime regulations, is being continued. While some executives believe that many of the problems confronting the carriers are beyond their control and that they have established outstanding records under difficult conditions during the war, others stress the need for improvement in operating practices, and the adoption of more efficient and progressive methods on the part of the carriers.

The need for obtaining more steel for freight cars was frequently stressed. Shortages of equipment also harass truckers, the survey finds, although this situation is being relieved somewhat by an increase in the production of trucks and parts. Because of the freight-car situation, however, an added load has been placed on the trucking companies, with the result according to one executive, that the truckers concentrate "their business on freight taking a high classification rating."

Severe shortages of water transportation are also reported. Some difference of opinion is noted as to the showing being made by coastwise and intercoastal steamship service. One Eastern manufacturer contends that "water transportation is neither adequate nor efficient, and we feel that contributing factors are government control of major steamship lines and the obvious decline of the American merchant marine. We, of course, ship all exports by water; however, we are not moving any coastwise or intercoastal shipments by water owing mainly to irregular schedules and frequent embargoes at ports. Labor conditions and exorbitant handling charges at piers make ocean shipments very unattractive at the present time."

Weather and crashes appear to have had an unfavorable effect on the demands for air travel, according to many executives. The uncertainty of schedules and arrival time has also been an obstacle, but it is believed that air travel will increase considerably, with more equipment becoming available, with better-trained personnel and with improved airport facilities. The comment most frequently made regarding air freight is that it is expensive and cannot be utilized for many types of products.

Most manufacturers surveyed expect to continue to rely upon the railroads to about the same extent as in the prewar period. While shifts have occurred, many executives feel they are only temporary. The railroads, they point out, have lost some business to other forms of transportation because of the car shortage, but in turn they have obtained business not generally carried in prewar days because of the current lack of adequate coastwise and intercoastal steamship service and changes in cost differentials.

Railroads are generally expected to continue handling large bulky products with relatively low value as well as carload shipments. In the less-than-carload freight field, keen competition between the railroads and the trucking companies is expected, particularly for hauls up to 500 miles. A number of executives believe that better coordination of all transportation is required. It is felt that many economies and faster service could be effected, and each form of transportation could perform the service for which it is best suited.

Eastbound "Century" Schedule Is Cut to 15½ Hours

Schedules of many local and through passenger trains have been rearranged, as usual, by Eastern railroads, with the inauguration of Daylight Saving Time April 27 in some states and a number of large cities, including New York and Chicago. In general, only minor adjustments have been made in running times between terminals and in accommodations provided. The New York Central, however, has effected a number of improvements in its through service arrangements, the outstanding one being the 15½-hour schedule of the eastbound "Twentieth Century Limited," which will leave Chicago at 4 p.m. Central Standard Time, to arrive in New York at 8:30 a.m. Eastern Standard Time.

Altogether 28 east-west New York Central trains will have shortened schedules, with time reductions ranging from 5 to 158 minutes—the latter being true of the eastbound "Water Level Limited." The road has announced that new Diesel-electric locomotives are being asigned to 17 through trains to supplement steam power in maintaining the new schedules. Its principal trains between St. Louis, Mo., and the East will be Diesel-powered, it was stated, as well as the "Century," the "New England States," the "Wolverine," the eastbound "Commodore Vanderbilt," and the westbound "Lake Shore Limited" and "Empire State Express." A new eastbound train, the "Mohawk," will leave Chicago at 5 p.m. (standard time) The new schedule of the "Southwestern Limited" from St. Louis eastbound is 55 min. faster, and the "Commodore Vanderbilt" from Chicago eastbound is 30 min. faster.

The Pennsylvania has adjusted its schedules to suit Daylight Saving Time, but no significant changes in the running time of the "Broadway Limited" and other through trains have been announced. Similar revisions have been made by other roads in the affected territory, accompanied in a few instances by shortening of schedules, as in the case of the "Ambassador" of the Boston & Maine, Central Vermont and Canadian National, which has been speeded up 25 min. between Boston. Mass., and Montreal.

B. R. W. Deacon Honored by Canada's Press

An event unusual and quite possibly unique in the annals of journalism—a subscription dinner tendered to a publicity man by outstanding representatives of the press—occurred in Montreal on the evening of April 19. Benjamin R. W. Deacon, manager of the Canadian National's press services, was the guest of honor at a dinner given for him at the Windsor Hotel by 100 members of the "International Society of Friends of Ben Deacon"—a group comprising, in the main, leading figures of Dominion newspaperdom; but including also token representation from the writing fraternity south of the international border, and a few C. N. R. officers.

Benjamin R. W. Deacon
(The monocle is not standard equipment)

The testimonial was inspired by Mr. Deacon's approaching retirement on pension. George H. ("Chief") Carpenter, executive editor of the Montreal Gazette, presided at the dinner, and Bernard K. Sandwell, editor of Toronto Saturday Night, proposed the toast to the guest of honor. The somewhat idealized portrait of the subject, reproduced herewith, was drawn for the menu of the dinner by "Top" Topham, well-known Montreal artist.

Freight Car Loadings

Carloading figures for the week ended April 19 were not available when this issue went to press.

Loading of revenue freight for the week ended April 12 totaled 758,166 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, April 12

District	1947	1946	1945
Eastern	160,234	142,607	163,846
Allegheny	174,696	129,247	183,789
Pocahontas	29,866	15,802	53,272
Southern	118,986	113,105	129,397
Northwestern	93,968	77,722	116,492
Central Western	118,678	108,697	127,522
Southwestern	61,738	62,118	72,695
Total Western Districts	274,384	248,537	316,709
Total All Roads	758,166	649,298	847,013
Commodities:			
Grain and grain products	45,732	35,299	49,759
Livestock	11,925	17,555	15,446
Coal	112,151	31,561	154,324
Coke	12,823	7,500	12,535
Forest products	45,178	43,700	41,368
Ore	27,198	9,832	58,834
Merchandise l.c.l.	125,734	130,288	114,705
Miscellaneous	377,425	373,563	400,042
April 12	758,166	649,298	847,013
April 5	715,159	643,644	765,672
March 29	829,412	809,142	836,000
March 22	844,041	804,606	816,741
March 15	841,147	799,906	816,556
Cumulative total, 15 weeks	11,991,340	11,025,921	11,690,915

In Canada.—Car loadings for the week ended April 12 totaled 71,312 cars, as compared to 66,639 cars for the previous week and 66,850 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
April 12, 1947	71,312	37,503
April 13, 1947	66,850	33,345
Cumulative totals for Canada:		
April 12, 1947	1,022,933	560,111
April 13, 1947	997,601	529,233

Train-to-Door Baggage Service Instituted by New Haven

The New York, New Haven & Hartford has announced institution of a "direct to your door" baggage service. Under the new plan, according to the road, the passenger stops at a New Haven baggage room where a "prepaid" delivery check is made out for the parcel. The baggage is then placed on the train by the carrier, taken off at its destination and delivered to its assigned address.

The New Haven said that a fee of 25

cents is charged in some cities. It also stated that if the baggage is sent to an address beyond the limits of a city, the passenger should have a collect delivery check made out and pay for the baggage on its arrival. The New Haven said its plan will avoid waiting for baggage to be unloaded, in addition to delivery charges and storage fees.

Operating Revenues in March 11.1 Per Cent Above 1946

From preliminary reports of 87 Class I railroads representing 81.5 per cent of total operating revenues, the Association of American Railroads has estimated that the March gross amounted to $585,360,572, an increase of 11.1 per cent above the $526,831,757 reported for the same 1946 month. Estimated March freight revenues were $483,095,802, compared with $393,629,821, an increase of 22.7 per cent, while estimated passenger revenues were $58,538,250, compared with $93,574,010, a decrease of 37.4 per cent. The estimate for all other revenues was $43,726,520, an increase of 10.3 per cent above March, 1946's $39,627,926.

Piped Radiant Heat Keeps Down Snow Deposits

An application of the principles of radiant heating to railroad car storage tracks to keep them free of ice and snow is shown in the accompanying illustration, made during a heavy snowfall this past winter at the Olyphant colliery of the Hudson Coal Company, Scranton, Pa. Protection for 2,700 ft. of rail and numerous frogs and switches is provided by 5,500 feet of "Rayduct," the Bethlehem Steel Company's radiant heating pipe. Steam is the heating element employed. The pipe is attached in direct contact with the rail head and is protected from drip water by shields of sheet metal.

The installation was made in 1945 and this is the second winter of operation. Galvanized bolts ½ in. by 2½ in. fitted with sleeves are used for attaching the Rayduct pipe and shields at intervals to the web of the rail. The pipe field-welded in lengths of several hundred feet, is laid on top of the sleeves and secured in place by bolting the shields on as covers.

The installation not only kept the rails free of snow, it is reported, but has reduced steam consumption over the older system in which a 1½ in. pipe was laid on the ties between the rails. It has also reduced flying steam under the breaker, improving visibility for the "car runners." Freezing of cars to rails also is said to have been eliminated.

Eastern Roads State Case for Commutation Fare Rise

As Interstate Commerce Commission hearings began April 22 in Brooklyn, N. Y., on the applications of several Eastern roads for authority to increase commutation fares, George T. Carmichael, vice-president, accounting, of the New York, New Haven & Hartford testified that commutation fares have not been increased by that road since 1925, although straight time hourly wage rates have risen since then 62.6 cents to $1.09, an increase of over 77 per cent. Commissioner John L. Rogers and Examiner Burton Fuller presided at the hearing.

As a result of the commission's recent decision authorizing increases in the New Haven's regular one-way fares, Mr. Carmichael said, the New Haven's gross income for the rest of the year will be increased by $3,650,000, but, nevertheless, on the basis of current fixed charges, a deficit of $4,055,000 will be incurred. The 1947 forecast was described as a conservative estimate based on present known conditions without allowing for further wage increases or higher material costs. In this connection he added that a demand for wage increases of 20 cents an hour recently had been received from the non-operating unions, representing about 80 per cent of the road's employees, which, if applied to all the New Haven's employees, would increase the payrolls and payroll taxes by approximately $17,500,000 a year.

For 1947, Mr. Carmichael pointed out, total operating revenues of the road were estimated at $149,550,000, an increase of approximately $290,000 over 1946, and total operating expenses were estimated at $122,900,000, a decrease of about $5,328,000. The decrease will be due largely to a drop of more than $4,220,000 in transportation expenses and $1,563,000 in maintenance expenses, caused primarily by a reduced volume of passenger and freight traffic.

The maintenance expenditures estimated for this year are essential to keep the property in proper shape for efficient and economical operation, he continued, adding that the budget program called for an increase of 9,077 tons of rail installation over the 1946 program and that 67,704 more new ties will be laid than during last year. Mr. Carmichael also said that miscellaneous routine maintenance was being curtailed. On the mechanical side there will be a reduction in the number of steam locomotives repaired, but repairs to Diesel-electric and electric engines, as well as box cars and coal cars, will increase.

Of the $60,192,000 total passenger revenues last year, he went on, $53,724,000 were earned in coaches, parlor and sleeping cars and $6,468,000 in commutation service. Of the coach and Pullman fares, $5,878,814 was secured on intrastate travel as follows: New York, $2,464,120; Connecticut, $1,607,820; Rhode Island, $103,329; and Massachusetts, $1,703,545. Mr. Carmichael presented an exhibit dividing the New Haven's income between freight and passenger operations. For 1946 the exhibit showed a deficit of $3,495,267 in passenger service operations. He said he estimated a deficit of $5,386,000 from passenger service operations this year. Both these deficits, he explained, included equipment rents, taxes and joint facility charges and did not allow for any interest or return on the transportation property used in passenger service.

In connection with the commutation situation, Mr. Carmichael said, the New Haven's trustees had been authorized by the federal court to ask for bids on 10 multiple-unit motor passenger cars and 36 trailer passenger cars to cost $3,600,000 and to rehabilitate 40 multiple-unit cars and 64 trailer cars at a total cost of $2,400,000 see the *Railway Age* of March 22, page 634). All this equipment will be used in the New York commutation area to provide for the greatly expanded and still expanding needs of the commuting public in that territory. In answer to a question, Mr. Carmichael stated carrying out this

"Rayduct" installation at Scranton, Pa.

program would depend somewhat upon the result of the pending application for increased commutation fares.

Representatives of the Long Island; Pennsylvania; Delaware, Lackawanna & Western; and New York Central appeared at the second day of the hearing. Little opposition was expressed to their requests for approval of the increases sought in their commutation fares, the details of which are somewhat different from the New Haven's proposals. Speaking for the Long Island and the Pennsylvania, W. S. Franklin, vice-president, traffic, of both companies, referred to the Long Island's program for improving its facilities and adding to its equipment, already reported in *Railway Age*, which he said depended for its consummation on the improvement in revenues that would result from fare increases.

U. S. Steel Hopes to Absorb Higher Labor Costs

The five principal steel producing subsidiaries of the United States Steel Corporation have concluded an agreement with the United Steelworkers of America — C.I.O. which provides for a general wage increase of 12½ cents an hour, or $1 a day, and other employee benefits, it was announced last week by Benjamin F. Fairless, president. This agreement, he said, will directly result in an estimated increase of $75,000,000 a year in U. S. Steel's employment costs. "We sincerely hope," Mr. Fairless' announcement concluded, "that with existing high levels of operations these increased costs can be absorbed within the limits of present prices for our steel products."

Bureau of Explosives Releases Report for 1946

During the first six months of last year 1,719,341 tons of military and commercial explosives were handled by the railroads as carload freight, according to the annual report for 1946 of the Bureau of Explosives of the Association of American Railroads. The close of the year marked the end of the 25th consecutive year in which no explosions resulted from the rail transportation of class A commercial explosives, the report said.

No persons were killed or injured in the transportation of class A, B or C explosives, report added, and the total property loss amounted to only $18, including a loss of $16 which was charged to the transportation of fireworks. The total loss in connection with the transportation of all classes of dangerous articles other than explosives was $391,058, compared with the loss of $600,090 reported for 1945.

"During the war a large number of new chemicals were developed," the report pointed out, which are classed as dangerous articles under Interstate Commerce Commission regulations. "Many of these chemicals have now been adapted for commercial use and notable among these are the liquid peroxides. . . . Prior to the war the regulations contemplated oxidizing materials only in the form of solid substances and the commercial use of the liquid peroxides necessitated research and development work and amendments to the regulations in order to provide proper packing and transportation. Recommendations have been made to the I. C. C. and the necessary provisions for the shipment of these chemicals have been included in the regulations.

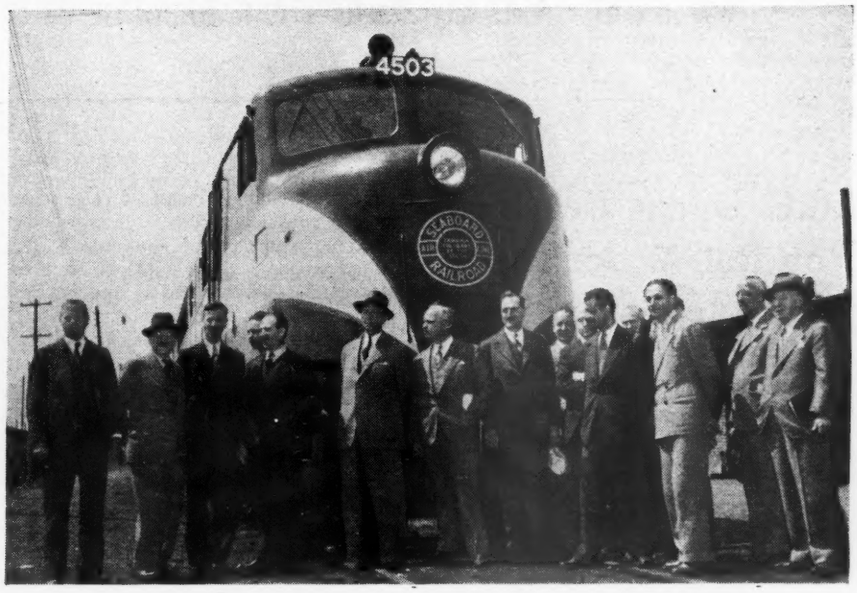
"Eleven fires were reported during the year in connection with the transportation of mineral wool such as is used in the insulation of buildings. Insulating materials of this type are not classed as dangerous articles under the I. C. C. regulations since they are incombustible and are not subject to spontaneous chemical changes which will cause fires in transportation. Investigation of the fires showed conclusively that every fire reported occurred within 48 hours of the time the car was loaded and that the fires started with ignition of the paper bags or containers in which the wool was packed.

"Investigation in manufacturers' plants developed that it has been a common practice to fill bags immediately on completion of the manufacturing process and to load bags in cars as soon as they were filled and closed. Since rock wool is produced by extruding molten slag with a steam jet the material is very hot when placed in the bags and the small percentage of the material which has not been formed into fibers retains its heat for some time. Due to the insulating qualities of the wool these high temperatures are not readily detectable but eventually the heat reaches the paper bags and ignites them. This is particularly liable to occur when bags are tightly packed in a freight car. . . . On the basis of the recommendation of this bureau several railroads now insist that shippers of mineral wool hold to a 48-hour holding period and consequently the number of fires has been greatly reduced."

During the year the bureau engaged in an investigation of railway track torpedoes to determine the required sensitivity and the measurement of the audible effect in order that the specifications might include these requirements. A measurement of the impact necessary to explode a torpedo by the lightest vehicle used in train service was calculated. The testing machine used for this purpose consists of a section of rail used as an anvil, upon which the torpedo is placed. To the rail is attached a framework supporting a 25-lb. steel weight which is mechanically released to fall upon the torpedo. It has been established that the weight, when dropped from a height of 13 in. will explode the torpedo. When dropped from less than 8 in. the torpedo fails to explode.

The transportation during 1946 of dangerous articles other than explosives resulted in 891 accidents, including 118 fires and 1 explosion. There were no fatalities. Fifty-five persons were injured. Of the total number of accidents, electric storage batteries accounted for 212; gasoline for 194; sulphuric acid for 68; crude oil for 54; nitric acid for 42; strike-anywhere matches for 40; and liquefied petroleum and hydrochloric acid for 28 each.

French Railway Men Visit Baldwin



Officers of the French National Railways, all of whom were members of the underground during the occupation of France by Germany, on April 18 inspected three types of locomotives on the half-mile track at the Eddystone, Pa., plant of the Baldwin Locomotive Works. Grouped in front of a Seaboard Air Line Baldwin Diesel-electric are Ralph Kelly, president of Baldwin; A. A. Parmantier, superintendent motive power, French National Railways; Georges Bohl, French Railway Mission, Washington, D. C.; M. L. Laplaiche, mechanical engineer, French railways; F. L. Armand, assistant general manager, French railways; C. E. Brinley, chairman of the board, Baldwin; L. W. Metzger, vice-president, operations, Baldwin; Col. J. W. Marsh, French Mission, Washington; R. N. Watt, general sales manager, Baldwin; Thomas Butts, manager, Paris office, Baldwin; Capt. Noel Concordet, chief, French North African Railway Mission, Washington; R. P. Johnson, chief engineer, Baldwin; R. P. Samie, Algerian Railroad, Washington; T. L. Foster, assistant to export sales manager, Baldwin; E. J. Harley, executive engineer, Diesel-electric, Baldwin. The French delegates are in the United States to visit the various American plants building the rolling stock, shop equipment, etc., ordered by the French National Railways, to study various phases of American railroading, and to learn about gas-turbine designs, Diesel-electric locomotives, and other types of locomotives burning fuel other than coal.

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A list of current publications appears on page 877.

With the Government Agencies

I.C.C. Opens Hearings on Rail-Water Rates

"Plight" of water carriers cited by Maritime Commission witnesses and others

Testimony by officers of the United States Maritime Commission and H. S. Brown, chairman of the Intercoastal Steamship Freight Association, marked the opening in Washington, D. C., this week of hearings before the Interstate Commerce Commission on those phases of the general Ex Parte No. 164 investigation of water-competitive railroad rates which involve transcontinental rail rates, intercoastal water rates and all-water, water-rail and rail-water rates between Pacific coast ports and interior points. Those three proceedings as docketed, respectively, as Nos. 29663, 29664, and 29708, and the hearings are being held before Commissioner Alldredge and Examiners Hosmer, Colgren and McCloud.

G. E. Talmage, Jr., chairman of the M. C.'s Domestic Shipping Committee, asserted that the existing competitive rail-water rates are blocking the "vitally needed revival" of domestic shipping. Referring to the fact that the M. C.'s authority to operate as a water carrier on domestic routes is scheduled to expire June 30, Mr. Talmage said that "it must . . . be obvious why private capital has not invested in these services and why the Maritime Commission has been compelled to seek emergency relief to enable it to withdraw from government operation without a complete breakdown of intercoastal service." He said that the M. C.'s prediction of a year ago that there would be widespread withdrawals of vessels from intercoastal trade has now become a reality.

Sees Water Lines Halted—"It is only the cumulative effect of years of progressive reductions in competitive rail rates, unexpectedly exaggerated by the tremendous rise in costs caused by the war, which has brought on the present strangulation of water-borne commerce," he stated. "If it continues at anywhere near the rate which we have witnessed in the past year and a half since the end of World War II, there will be a loss to American industry and to the public which it will take many years to restore, if a restoration will then be possible at all."

"The proposal submitted to the Interstate Commerce Commission on April 7 by the transcontinental rail carriers, which is in effect only a revival of that portion of their petition in Ex Parte No. 162 which was denied, is at best only a partial solution to the problems of the water carriers. . . . If granted, however, there will be some aid to the intercoastal water carriers from correspondingly increased rates which they can consider in determining whether or not to resume private operation." This railroad proposal, along with one from the water carriers, was noted in the *Railway Age* of April 12, page 765.

Mr. Talmage said that it is the M. C.'s hope that the interim relief embodied in the emergency rate increases set forth in the carriers' proposals will be permitted to become effective before July 1. Such increases, he contended, would provide the "stimulant needed to keep the patient alive until the investigation can be completed and a more permanent cure effected."

Other M. C. witnesses included R. C. King, chief of its Trade Routes Section, Research Division, and R. R. Doyle, chief of its Operating Department's Voyage Cost Control Section. Concluding a 21-page prepared statement, Mr. King stated that "over-all results show conclusively that intercoastal commercial service cannot be operated profitably now or in the future in competition with transcontinental rail 'water-depressed' rates." Testimony along the same lines was given by Mr. Doyle.

Urge "Proper" Rail Rates—Mr. Brown said that the water carriers are seeking a specific order from the I. C. C. which will require the railroads to remove the "violations" which exist in connection with rates on certain commodities and a "general order, or such other action by the commission as will require the railroads to cease and desist from the general practices of improper rate making in competition with the intercoastal carriers, and to examine their rate structure with a view to making additional rate adjustments in line with such findings as we hope the commission will enter in this proceeding."

According to Mr. Brown, transcontinental railroad rates "generally have been made against water competition." He said that the water carriers intend to submit briefs showing that many railroad rates, including transcontinental rates, have been depressed to meet water competition. He said that the I. C. C. should examine "such depressed rates with a view to placing them on a proper level, particularly in view of the well-known fact that water carriers themselves have incurred substantial increases in costs which presumably would have to be reflected in rate increases. . . ."

"At the conference with the railroads directed by the commission on March 17," Mr. Brown also testified, "I asked the railroads to inform us specifically what changes were necessary in our rates to make it possible for them to place these particular transcontinental rates, or any other transcontinental rates, on a non-depressed and normal basis. I was unable to elicit any information whatsoever on the subject."

Asserting that the intercoastal carriers

(*Continued on page 867*)

Opposes I.C.C. Order on Car Service Rules

Examiner Rice advises commission it should not issue regulations

Making his proposed report on that phase of the Interstate Commerce Commission's freight-car service investigation which involves the question of whether or not the commission should formulate and promulgate cars service rules, Examiner Claude A. Rice has recommended a commission finding that this should not be done. "The commission," he said, "should find that the views of the participating parties, as expressed in the evidence and on brief, are preponderantly against the proposal."

Oral argument on the proposed report will be held before the commission at Washington, D. C., on May 14. The proceeding is docketed as No. 29669, and the phase covered by Examiner Rice was the subject of public hearings held last month before the commission's Division 3, as reported in the *Railway Age* of March 22, page 624, and March 29, page 669.

O. D. T. Proposal—The principal proponent of commission action is the Office of Defense Transportation, which, as the examiner summarized its position, does not recommend that the commission formulate and promulgate car service rules at this time of its own volition. "It suggests," the proposed report continued, "that the commission, by order, require each railroad to file rules respecting car service with the director of the commission's Bureau of Service, and that, after hearing, such rules, with such modifications as the commission may require, be made obligatory upon each respondent, with the understanding that if any carrier fails to file its proposed car service rules, the director of the Bureau of Service will prepare rules which, after hearing, shall be prescribed for future application.

Meanwhile, the railroads with the support of shipper interests oppose commission action. The Association of American Railroads and the Class I roads, as the examiner put it, "declare that the distribution and utilization of the freight car supply lie at the heart of railroad operation," and they find no evidence that more efficient use of cars would be accomplished under commission rules. The railroads contend further that car-shortage conditions complained of can be remedied by commission service orders—"if susceptible to relief through the commission at all."

Earlier in his report, Examiner Rice had explained that under present conditions, Service Division "have been largely suspended and disregarded," and the relocation

and distribution of freight cars as between carriers "are now governed in large measure by special orders" issued by the commission and the A. A. R. In this connection he pointed out that the A. A. R. has sometimes issued special orders directing the return home of a particular type of car with which certain roads have provided themselves to protect the traffic they originate. Mr. Rice cited as an example "the open-top cars of certain coal carriers."

"Similar orders," he added, "could be entered with respect to box cars, purchased by railroads like the Great Northern, and the Minneapolis & St. Louis, and constructed primarily for the carrying of grain and grain products. Many of the box cars now being moved to the Northwest and Central West under car relocation orders, while usable for rough freight, are not suitable for commodities like flour without coopering, cleaning and lining, which require time."

Sees New England Overstocked—As the proposed report pointed out in another place, most of the evidence presented at the hearings pertained to the supply of box cars, the "most urgent appeals" coming from the grain-loading areas, while "comparatively little interest in the proceeding was manifested by shippers and receivers of freight in the more easterly and southeastern parts of the United States." Figures showing the relationship of cars on line to ownership and reported delays indicated to Mr. Rice that the New York, New Haven & Hartford had on its rails "more freight cars than can be handled efficiently," and that the Boston & Maine is "another carrier in New England which appears to be heavily overstocked with freight cars."

The examiner went on to suggest that penalty per diem charges might serve to discourage undue detention of cars by railroads, although he noted that the matter is already under "more specific consideration" in another commission investigation, No. 29670. He also reviewed evidence to the effect that the railroads had been responsible for delays in the switching of cars and other testimony reporting that shortages of motive power and lack of personnel were sometimes involved. At the same time he found statistical records indicating that, "despite the reported car delays, interruptions due to labor strikes in the past year or more, and unsatisfactory service reported by the shippers," the railroads "have been handling a substantial volume of traffic per railroad car in service."

Calls for Data in L.C.L. and Small Shipments Cases

The Interstate Commerce Commission has issued an order requiring Class I railroads, excluding switching and terminal companies, to furnish certain information with respect to l.c.l. traffic for use in the pending investigations of pick-up and delivery service and charges on small shipments. The proceedings are docketed as Nos. 29555 and 29556, respectively, and the present order was dated April 11.

It prescribed forms for the submission of the required information, which is to include a tabulation of the number of shipments, pounds, and through freight charges on l.c.l traffic terminated Wednesday, May 21, 1947. Also required is another tabulation showing the distribution of pounds of l.c.l. traffic by classification ratings, this being a 20 per cent sample of the l.c.l. shipments weighing less than 1,000 lb. which are embraced in the one-day traffic study.

Another prescribed form calls for information as to pick-up and delivery practices, payments and allowances for l.c.l. shipments weighing less than 1,000 lb. which were originated or terminated on Wednesday, June 11, 1947; an analysis of l.c.l. station costs—freight, charged to account 373 for June, 1947; cars given freighthouse switching and the average load per l.c.l. car for the year 1946 and June, 1947; yard engine-minutes required in switching freighthouse cars for one-day period at test stations; a summary of yard engine-minutes for various classes of switching; and certain "miscellaneous data."

The data called for in the second of the above forms must be filed with the commission's Bureau of Transport Economics and Statistics on or before August 15, while returns on the first are due on or before November 1.

Former R. F. C. People Who Went with Railroads

Senator Tobey, Republican of New Hampshire, who is chairman of the Senate committee on banking and currency this week made public a list of more than 80 persons associated in some way with the Reconstruction Finance Corporation during the chairmanship of Jesse H. Jones, who have since become associated with railroads and other private companies. "The assets of the railroad corporations, controlled by boards of directors or management, including the R. F. C. appointees, total more than $4,000,000,000," Mr. Tobey said in making public the list.

The list had been supplied by R. F. C. at Mr. Tobey's request. As reported in the *Railway Age* of April 19, page 803, the Senate committee which Mr. Tobey heads is now investigating the extension until 1965 of an R. F. C. loan in excess of $80,000,000 to the Baltimore & Ohio. Hearings in connection with that investigation brought out the fact that certain B. & O. executives were formerly associated with R. F. C. or the Federal Loan Agency.

They include Stewart McDonald, chairman of the executive committee; R. L. Snodgrass, vice-president in charge of finance; and F. E. Baukhages, general solicitor. Also, C. M. Clay, former B. & O. general solicitor, who has condemned the loan-extension plan.

The foregoing were on the list made public by Mr. Tobey while others listed with their railroad association included the following: Wilson McCarthy, trustee, Denver & Rio Grande Western; John W. Barriger, president, Chicago, Indianapolis & Louisville; S. H. Husbands, director, Seaboard Air Line; James L. Homire, director, Wabash; Howard J. Klossner, director, Chicago & North Western; Emmet McCaffery of the law firm of Dorr, Hammond, Hand & Dawson, which has been retained in railroad cases; Frederick E. Lyford, former trustee of the New York, Ontario & Western; Mrs. Eileen Watt, secretary, Legal Department, B. & O.

In another spbmission, the R. F. C. stated that C. B. Hemderson, who recently resigned as its chairman, is a director of the Missouri Pacific. Also, that Harvey J. Gunderson, an R. F. C. director, was a reorganization manager in the D. & R. G. W. proceeding; that W. W. Sullivan, chief of the Railroad Division, was designated as a reorganization manager for the Chicago, Rock Island & Pacific, but did not act since the R. F. C. loan was paid off; and that the late Frank C. Wright, adviser to R. F. C. directors while continuing as vice-president of the Bangor & Aroostook, served as reorganization manager of the Western Pacific and D. & R. G. W.

Army's Transportation Meetings

The War Department has announced Transportation Corps conferences to be held on the following schedule: New York, April 28, 29, 30; Baltimore, Md., May 1, 2, 3; Atlanta, Ga., May 7, 8, 9; San Antonio, Tex., May 19, 20, 21; San Francisco, Cal., May 26, 27, 28; Seattle, Wash., June 2, 3, 4; Chicago, June 9, 10, 11.

The purpose of these conferences is to discuss transportation subjects, including proper issuance of transportation requests, delay en route travel, troop movement procedure, return of World War II remains, loss and damage, problems in routing freight shipments, rate negotiations, system of accounts, handling of records of administrative vehicles, and Class A bus transportation.

I. C. C. Hears Argument in Fare-Increase Cases

The Interstate Commerce Commission last week heard oral argument at Washington, D. C., in the No. 29711 preceeding wherein railroads of the Eastern district and Pocahontas region, other than the New York, New Haven & Hartford, are seeking authority to increase basic passenger fares from 2.2 cents to 2.5 cents per mile in coaches and from 3.3 to 3.5 cents in parlor and sleeping cars. The New Haven, having got its petition in sometime before the joint proposal was filed, has already been granted authority to make interstate fare increases on the foregoing basis, but last week's argument did include that phase of the New Haven proceeding (No. 29678) which involves the road's request for modification of the outstanding commission order affecting intrastate fares in New York.

Issued under section 13 of the Interstate Commerce Act, that order has been outstanding since 1920 when the commission promulgated it to bring New York intrastate fares into line with an interstate adjustment approved at that time. Railroad parties to the general petition also seek modification of this New York order and of other like orders with respect to intrastate fares in Ohio, Illinois and Michigan. Thus the carrier approach to the intrastate-fare phase, with respect to those four states where such fares are now held in line with the interstate scale by section 13 orders, was to ask the commission to modify such or-

Selected Income and Balance-Sheet Items of Class I Steam Railways

Compiled from 130 reports (Form IBS) representing 134 steam railways
(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways — For the month of January 1947	1946
1. Net railway operating income	$57,717,747	$65,912,497
2. Other income	14,881,253	14,219,870
3. Total income	72,599,000	80,132,367
4. Miscellaneous deductions from income	3,281,579	2,653,685
5. Income available for fixed charges	69,317,421	77,478,682
6. Fixed charges:		
6-01. Rent for leased roads and equipment	10,603,430	14,896,908
6-02. Interest deductions[1]	26,504,307	29,719,097
6-03. Other deductions	137,591	116,887
6-04. Total fixed charges	37,245,328	44,732,892
7. Income after fixed charges	32,072,093	32,745,790
8. Contingent charges	3,250,099	2,993,441
9. Net income[2]	28,821,994	29,752,349
10. Depreciation (Way and structures and Equipment)	28,882,996	28,285,180
11. Amortization of defense projects	1,364,835	482,875
12. Federal income taxes	24,631,799	25,904,352
13. Dividend appropriations:		
On common stock	2,902,627	2,902,627
On preferred stock	2,582,269	2,599,161
Ratio of income to fixed charges (Item 5÷6—04)	1.86	1.73

Selected Asset and Liability Items	All Class I Railways — Balance at end of January 1947	1946
17. Expenditures (gross) for additions and betterments—Road	$18,637,880	$18,317,381
18. Expenditures (gross) for additions and betterments—Equipment	33,175,303	25,255,842
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	580,209,251	566,709,589
20. Other unadjusted debits	170,470,556	167,697,502
21. Cash	930,200,102	1,034,848,182
22. Temporary cash investments	1,047,340,900	1,574,219,356
23. Special deposits	165,760,968	166,793,905
24. Loans and bills receivable	366,985	457,568
25. Traffic and car-service balances—Dr.	49,985,881	43,660,024
26. Net balance receivable from agents and conductors	126,866,733	101,545,980
27. Miscellaneous accounts receivable	293,445,333	448,571,440
28. Materials and supplies	673,657,401	605,001,517
29. Interest and dividends receivable	13,958,661	26,039,789
30. Accrued accounts receivable	172,015,406	266,315,788
31. Other current assets	57,540,892	58,453,415
32. Total current assets (items 21 to 31)	3,531,139,262	4,325,906,964
40. Funded debt maturing within 6 months[3]	189,044,433	140,012,125
41. Loans and bills payable	9,385,000	10,354,058
42. Traffic and car-service balances—Cr.	100,181,290	141,975,709
43. Audited accounts and wages payable	476,615,108	462,359,539
44. Miscellaneous accounts payable	186,098,362	168,554,887
45. Interest matured unpaid	52,614,690	51,716,036
46. Dividends matured unpaid	7,551,517	7,589,585
47. Unmatured interest accrued	68,384,318	67,253,633
48. Unmatured dividends declared	19,795,787	19,738,988
49. Accrued accounts payable	161,782,768	209,971,609
50. Taxes accrued	432,919,442	806,457,513
51. Other current liabilities	100,088,288	106,488,878
52. Total current liabilities (items 41 to 51)	1,615,416,570	2,052,460,435
53. Analysis of taxes accrued:		
U. S. Government taxes	320,474,256	674,879,758
Other than U. S. Government taxes	112,445,186	131,577,755
54. Other unadjusted credits	365,574,642	415,741,619

[1] Represents accruals, including the amount in default.
[2] After a deduction of $295,909, taken out of operating revenues to create reserves for land grand deductions in dispute.
[3] Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

ders in a way which would make them applicable to the proposed increase. Meanwhile, no applications have been filed with the utility commissions of those states.

Thomas P. Healy, general solictor of the New York Central, made the railroads' argument in No. 29711, while the New York state phase of the New Haven case was argued for that road by H. D. Boynton, its commerce counsel. The Public Service Commission of New York was represented by its assistant counsel, J. J. Doran, and the Public Utilities Commission of Ohio by W. V. Blake, superintendent, Bureau of Rates and Service. The argument was confined to the basic fares, since the increased-commutation-rate proposals of both proceedings are still at the hearing stage, such hearings having opened in Brooklyn, N. Y., this week.

General Solicitor Healy of N. Y. C. argued that the petitioning railroads were in serious need of the additional revenues which the proposed fare increases would bring. He reviewed the evidence presented at the recent hearings (see *Railway Age* of April 5, page 713), pointing out that such roads as the N. Y. C. and Pennsylvania were currently reporting net income deficits. Also, he urged the commission to accept the carriers' judgment that their financial position would be bettered by the proposed increases which they calculated would produce substantial net revenues.

As to the request for modification of the section 13 orders affecting intrastate fares in New York, Ohio, Michigan and Illinois, Mr. Healy stated the railroad position as one holding "that the propriety of such modification has been clearly established and is necessary in the present emergency." For the New Haven, Mr. Boynton made a similar argument, saying that its request for modification of the order relating to New York intrastate fares was "appropriate, timely and necessary."

Mr. Boynton pointed out that the order requires the New Haven to maintain certain basic one-way fares for intrastate transportation in New York, and that such fares could not be changed without authorization from the I. C. C. Thus, Mr. Boynton argued further, the New Haven was not "by-passing" the New York commission, because the prior action of the I. C. C. deprives the state of authority over the fares involved so long as the order remains in effect.

Mr. Doran argued that the railroads should be required to present their case for changes in New York fares to the New York commission. Among other things he said that I. C. C. authority over intrastate rates was found only in section 13, and that the United States Supreme Court's interpretation of that section had laid down rules to the effect that section 13 orders must meet a high standard of certainty with no presumption on the side of supplanting the primary jurisdiction of the state.

For the Ohio commission, Mr. Blake stated that the railroads had come to that commission for intrastate fare adjustments on at least three occasions since the section 13 order affecting such fares had been issued. Thus he argued that present Ohio intrastate fares result from action of the Ohio commission and not from the section 13 order. He added that the carriers should be required to exhaust remedies in Ohio before seeking section 13 relief.

Bills in Congress

Representative Lemke, Republican of North Dakota, has introduced H. R. 3140 to amend the Interstate Commerce Act "to provide for fair and impartial regulation of car service." The bill proposes to create what would be a somewhat autonomous Bureau of Service "within the Interstate Commerce Commission." It would be the duty of that bureau, headed by a $10,000-a-year director, to administer the car service provisions of the act and "enforce just and reasonable car service."

Specific procedures which the bureau would be required to adopt are set out in the bill. Also, there are provisions whereby railroads would be given income-tax credits in the amount of the net reductions in debt which they achieved, but not in excess of 25 per cent of their tax liability for the year involved. Like credits would be allowed for amounts spent for new freight equipment, but not in excess of 5 per cent of the tax liability. Finally, there are provisions whereby railroads would be permitted to borrow from the Reconstruction Finance Corporation to refinance their indebtedness, the interest rate on such loans to be 2 per cent.

Chairman Wolverton of the House committee on interstate and foreign commerce has introduced H. R. 3152 to extend until June 30, 1948, the President's powers with respect to allocating the use of transportation equipment and facilities by rail car-

riers. Such powers are now scheduled to expire next June 30.

Representative Cole, Republican of Kansas, has introduced H. R. 3134 to amend the Civil Aeronautics Act by adding to its certificate provisions a stipulation to the effect that "no special or different standards, requirements, or burden of proof shall be applied to any applicant . . . because it is a carrier other than an air carrier."

Chairman White of the Senate committee on interstate and foreign commerce has introduced "by request" S. 1141 which would rewrite the Transportation of Explosives Act. Such legislation has been recommend by the I. C. C. in its annual reports of recent years.

Another bill has been introduced to strike from the Railroad Unemployment Insurance Act the sickness and maternity benefits added last year by the Crosser Act and to place the unemployment-insurance tax on a sliding-scale basis which would immediately reduce this levy (paid entirely by the railroads) from 3 per cent to ½ per cent of taxable payroll. The bill is H. R. 3150, sponsored by Representative Howell, Republican of Illinois.

Senator Langer, Republican of North Dakota, has introduced another resolution to approve the United States-Canada agreement for development of the St. Lawrence seaway and power project. It is S. J. Res. 103. Meanwhile, the Senate has acceded to President Truman's recent request and returned to him various "obsolete" unratified treaties, including the St. Lawrence treaty with Canada which was signed July 18, 1932. Since that treaty failed of Senate ratification, proponents of the project have adopted the joint-resolution approach which would require only a majority vote of both branches of Congress.

I. C. C. Approves Greyhound Stock Split-Up

Division 4 of the Interstate Commerce Commission has conditionally authorized the Greyhound Corporation to issue 6,220,060 shares of common stock, without par value, for a 3-to-1 split-up of its 3,110,030 shares now outstanding. Among conditions prescribed by the commission is one which will require Greyhound to transfer $3,382,441 from its surplus account to its common capital stock account. The majority report represents the view of Commissioners Miller and Rogers; Commissioner Mahaffie dissented.

I.C.C. Opens Hearings on Rail-Water Rates

(*Continued from page 864*)

must maintain rates which will draw traffic to and from interior points, Mr. Brown said that "it cannot be too strongly emphasized that in considering the competitive relationship of transcontinental rates and intercoastal rates, it must be kept in mind that when the intercoastal route is used, the shipper must pay, in addition to the intercoastal rate, various so-called accessorial charges such as marine insurance, the rail or truck charges to and from the docks, wharfage charges . . . and in many instances carloading and unloading."

Sees Railroads Inert—Among other things, Mr. Brown said that (1) the intercoastal water-rate structure fluctuated "violently and for the most part secretly" prior to June, 1933; (2) even if the I. C. C. had granted the transcontinental railroads the full increases requested in Ex Parte No. 162, the rates on certain commodities would still be lower than the rates in effect on June 1, 1933, despite the "enormous increase" in costs which the railroads have been forced to meet since that time; and (3) in view of the frequent criticisms of the I. C. C. from railroad, pro-railroad and other sources for not granting immediately and completely any blanket relief requested by the railroads from maximum rate orders, as in Ex Parte No. 162, it is an "appropriate time" for the I. C. C. to ask the railroads why they haven't done something about increasing this particular class of rates."

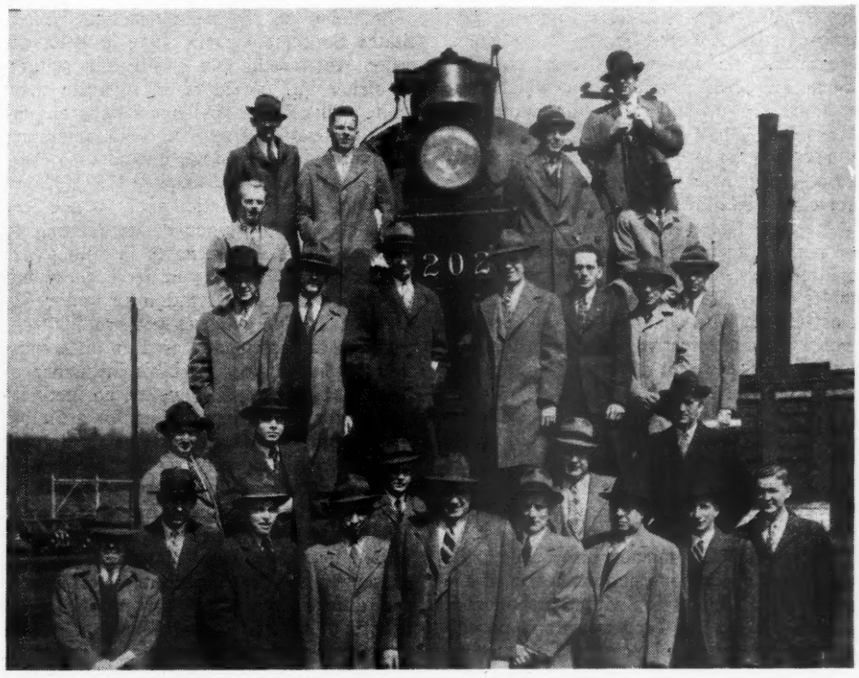
Mr. Brown charged that it is "obvious" that the railroads regard themselves as "the only transportation system and they have banded together against intercoastal carriers, to squeeze them, so to speak, at both ends." "In Ex Parte No. 162," he stated, "the commission found the eastern railroads need greater increases in revenue than railroads generally throughout the United States. We respectfully call the commission's attention to the fact that an appropriate change in the relationship between their divisions of transcontinental rates and their rates to and from port cities, by returning a reasonable amount of interior business to the intercoastal routes, would substantially improve the revenues of the eastern carriers by giving them a more profitable haul than they now get on the same traffic over the all-rail route. . . ."

The views of the port authorities of New York, Boston, Mass., and Baltimore, Md., were epitomized in testimony of W. P. Hedden, director of port development, Port of New York Authority. "The maintenance of intercoastal water services to augment rail transportation is essential to the peacetime as well as wartime services of the American Merchant Marine," he said. "It is well known that many waterfront industries and terminals . . . have been built up largely as a result of the intercoastal shipping service to the Pacific coast and other domestic ports. Failure to restore this intercoastal service would reduce the markets available to industries in the hinterland as well as in the Port of New York and other United States port communities."

Prior to the start of the hearing, a motion was filed by J. S. Knudson, representing the Secretary of Agriculture, in which the latter asked the I. C. C. to make the water carriers prove that every railroad rate they have attacked is below a compensatory level before any increase is authorized. At the same time, the motion said that the railroads should be placed under a corresponding burden of proof to show, with respect to the rates they "seek" in Ex Parte No. 162, that such rates are not now producing reasonable earnings. No immediate action was taken on the motion, which Mr. Knudson said should be referred to the entire commission for appropriate ruling.

The commission last week received rate proposals submitted by the respondent rail and water carriers in two other proceedings growing out of Ex Parte 164—Nos. 29721 and 29722, pertaining to all rail commodity rates between California, Oregon and Washington and Pacific coast-

* * *



Chief clerks of the traffic department, Reading Company, from on-line and off-line offices, made a four-day tour of the system, April 7 to 10, inspecting facilities and installations. The trip was arranged by R. W. Brown, president, to better acquaint the chief clerks with the operation of the railroad

wise water rates, respectively. As noted in the *Railway Age* of April 5, page 717, these proceedings have been set for hearing on April 28.

The railroads have proposed to increase, with certain exceptions, the maximum rail rates between California, Oregon and Washington to the extent sought in Ex Part No. 162. The water carriers, on the other hand, seek to increase all rates wherever possible by 50 per cent above the level of the June 30, 1946, rates and to add to such increased rates the additional increases authorized in Ex Parte No. 162.

Suspends Commutation Fares Sought by C. N. J., Reading

The Interstate Commerce Commission has suspended from May 18 until December 17 the operation of schedules whereby the Central of New Jersey and Reading are proposing to increase their commutation fares between points in Pennsylvania and New Jersey and between points in those states and New York City. The suspension order of April 18 set the proceeding, docketed as I. & S. No. 5488, for hearing, along with the other pending commutation-fare cases, before Commissioner Rogers and Examiner Fuller at the Hotel St. George, Brooklyn, N. Y., on April 22.

Southern's New Diner Rules Found Non-Prejudicial

Present dining-car regulations of the Southern are not violative of any provision of the Interstate Commerce Act, the Interstate Commerce Commission has ruled in a report which found at the same time that a complaining negro passenger was subjected to undue and unreasonable prejudice by the regulations in effect on October 7, 1944, when he failed to obtain the dining-car service he sought during the course of his journey as a first-class Pullman passenger from Atlanta, Ga., to New York. Meanwhile, the commission found no basis for an award of reparations, in which connection the complainant, Benjamin E. Mays, had sought $2,500.

The Southern's present dining-car regulations, which the commission found to involve no violation of the act, require that a specified table, seating four persons, be curtained off and "reserved exclusively for colored passengers," and that the other tables in the diner "shall be reserved exclusively for white passengers." That rule, which became effective March 1, 1946, allots about 8 per cent of the average diner's space for the exclusive use of negro passengers. Evidence in the case indicated that during the period from May 14 to 24, 1945, negro civilians purchased 1.19 per cent of the meals served on Southern diners operating between New York and Washington.

When Mr. Mays made his journey, the applicable regulations permitted use of the curtained-off tables for white passengers if all other seats had been taken and no colored passengers had presented themselves for meals. This had been done when the complainant appeared sometime after the call for the meal had been made in the Pullman car where he was riding. He demanded that he be seated at a vacant table in the "white" section, and the steward refused to meet the demand. When the "colored" section again became vacant, the steward sent a waiter to advise Mr. Mays that he would be served, the steward testifying that this was 50 minutes before the train arrived at Greenville, S. C., where the diner was taken off the train. Mr. Mays told the waiter that he had lost his appetite and did not care for dinner.

The new regulations were issued by the Southern following the decision of the United States District Court for the District of Maryland in *Henderson v. United States*, 63 Fed. Supp. 906, decided December 17, 1945. That case involved the complaint of another negro, Elmer Henderson, against the Southern's dining-car service; and the court remanded the case to the commission for further hearing. The commission's Division 4 had found that Complainant Henderson was subjected to undue prejudice, but that the regulations put into effect after his journey (and in effect at the time of Complainant May's journey) would not result in any substantial inequality of treatment as between negro and other passengers.

As summarized by the commission, the court's opinion remanding the Henderson complaint for further hearing held that where equality of treatment is provided, segregation is valid. Continuing, the commission reported the court as having held further that "where railroad regulations permit the seating of white passengers at tables reserved for colored passengers, equality of treatment requires that a colored passenger be seated at any available vacant seat in the dining car, if space reserved for colored passengers is occupied." The commission went on to find in effect that the new regulations reserving the curtained-off space "exclusively" for negroes are in compliance with the principles announced by the court.

In doing so, it mentioned the United States Supreme Court's June 3, 1946, decision which held that a Virginia statute, requiring bus operators to separate their white and colored passengers, was an unconstitutional interference with interstate commerce and, therefore, invalid (see *Railway Age* of June 8, 1946, page 1153). "That decision," the commission said, "is not here in point because circumstances relating to services afforded passengers in dining cars are substantially different from those appertaining to transportation in motor vehicles. . . . The act does not prohibit segregation of passengers based on differences in race, but it does prohibit inequality of treatment. There is, however, no justification in the instant proceeding for a finding that equality of treatment can result only from discontinuance of regulations providing for segregation in dining cars."

Chairman Aitchison, dissenting-in-part, said he was constrained to regard it as now settled by the courts "that the race of a passenger may not constitute a valid basis for differentiation or segregation in the course of interstate travel upon a carrier subject to the provisions of the Interstate Commerce Act, as that act now stands." Commissioner Mahaffie subscribed to the Aitchison view, while Commissioners Barnard and Mitchell, the former "being necessarily absent," did not participate.

Meanwhile, the further hearing ordered by the court in the Henderson case has been held, and the commission has received a proposed report on it from Examiner Walter D. McCloud. He recommends a finding like the above, i.e., that the Southern's present dining-car regulations do not result in undue prejudice.

Equipment and Supplies

U. P. Orders Total $88 Million

The Union Pacific has placed orders for $88,785,500 in new and modern equipment since the war, according to E. Roland Harriman, chairman of the board of directors, in a letter to U. P. stockholders. He said the equipment included the following: passenger cars, $9,000,0000; freight cars, $18,378,500; refrigerator cars (for Pacific Fruit Express Company, owned jointly with the Southern Pacific), $37,600,000; and Diesel locomotives, $23,807,000.

LOCOMOTIVES

The BANGOR & AROOSTOOK recently ordered 12 1-500-hp. Diesel-electric freight units from the Electro-Motive Division of the General Motors Corporation.

The MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE has ordered eight 1,500-hp. Diesel-electric road switchers from the Baldwin Locomotive Company. Delivery is expected this fall.

FREIGHT CARS

The CHESAPEAKE & OHIO has ordered 3,000 70-ton steel hopper cars of welded construction from the American Car & Foundry Co., it has been announced by Robert J. Bowman, president of the C. & O. The cars, costing approximately $10,500,000, will be built at Huntington, W. Va., and are to be equipped with friction bearings because, the announcement said, many of them probably will be used in off-line service. Bids were based on the builder's own specifications and design in order to expedite delivery. The C. & O.'s request for bids on these cars was reported in the *Railway Age* for March 29.

IRON AND STEEL

The MAINE CENTRAL has ordered 2,578 net tons of rails from the Bethlehem Steel Company.

SIGNALING

The NEW ORLEANS, TEXAS & MEXICO (part of the Missouri Pacific) has ordered materials from the General Railway Signal Company for the installation of 2 all-relay electric interlockings near Baton Rouge, La. One control machine, to be located east of the Mississippi river, will have 11 track indication lights and 6 levers for the control of 3 switch machines and 12 signals

governing traffic at both ends of a single-track bridge over the river. Coded track circuits will be used on the bridge. The other control machine, to be located west of the river, will have 16 track indication lights and 9 levers for the control of 3 switch machines and 16 signals governing approaches to the bridge. Type K relays, Model 5D switch machines, and Type G signals will be used in these installations.

The ELECTRO-MOTIVE DIVISION of the General Motors Corporation has ordered 27 sets of continuous inductive train control equipment from the General Railway Signal Company. Eleven sets are for installation on Diesel-electric passenger locomotives and 16 for Diesel-electric freight locomotives, all for the Chicago & North Western.

The SEABOARD AIR LINE has placed orders with the Union Switch & Signal Co. for the materials required to extend the Starke-Hawthorne, (Fla.) centralized traffic control territory south to Nolem, approximately 69 mi. The materials involved include the necessary code equipment, color-light signals, electric switch layouts, relays, rectifiers, housings and associated equipment. The field installation work for this project will be handled by the railroad company's forces. The Seaboard also has placed orders with the Union Switch & Signal Co. for the materials required to install centralized traffic control in the territory from Cary, N. C., to Moncure, approximately 22 mi. Involved in this order are the necessary relays, rectifiers, housings, color-light signals, code equipment, and additional levers and lights for the existing control machine at Raleigh. The field installation work for this project will be handled by the railroad company's forces.

Car Service

I. C. C. Service Order No. 260, which restricts the salting of ice in refrigerator cars loaded with citrus fruits in California, Arizona, Texas or Florida, has been modified by Amendment No. 8, which allows 3 per cent salting at regular icing stations of shipments of oranges and/or grapefruit originating in Florida.

General Permit No. 5, issued by Director Clinger of the I. C. C. Bureau of Service under Service Order 396 authorizes reconsignments of refrigerator cars involving backhauls when subject to a through or joint rate but not subject to charges for backhauling or out-of-route movement. The order, which requires the reconsignment of refrigerator cars within 48 hours from the first 7 a.m. after arrival at a diversion point, was recently amended to prohibit railroads from executing reconsignment orders which would involve backhauling.

Special Car Order No. 37 (1947 reissue) has been issued by the Car Service Division, Association of American Railroads, to direct the expedited return to home roads of ventilated box cars owned by the Atlantic Coast Line, Central of Georgia, Charleston & Western Carolina, Louisville & Nashville, Seaboard Air Line, and Southern. The order, effective from May 1 until further notice, was required "account impending heavy movement of perishable freight, principally watermelons and potatoes, with reduced and possibly inadequate supply of ventilated box cars."

Supply Trade

Budd Backlog Totals About $184,000,000

On March 31 the Budd Company had a backlog of orders totaling approximately $184,000,000, the largest peacetime total in its history, according to Edward G. Budd, president. This represented an increase of about $22,000,000 over the figure at the end of last year which included backlogs of almost $102,000,000 for automotive work, $55,000,000 for railway cars and $5,000,000 for other products.

"The net loss for 1946," Mr. Budd said, "amounted to $3,979,536 after given effect to a recovery of $8,263,000 in income taxes paid in prior years. . . . Total sales for the year were $122,254,375 as compared with $137,192,909 in 1945 and $69,332,607 in 1940. . . . We delivered from our Red Lion plant a total of 103 stainless steel railroad cars during 1946. Although this was fewer than we had anticipated, it was good performance for a year noted for strikes and material shortages. There are now more than 50 cars on our four assembly lines in the plant and by the latter part of the year we expect to be delivering two completed railway cars each day. That our situation regarding receipt of materials, and therefore production, is improving, is seen in the fact that during January and February the company made a net profit of $1,191,641 after providing for income taxes estimated at $457,800."

J. M. P. McCraven, assistant manager of the **Texas Company,** has transferred his headquarters from New York to 1204 McCormick building, Chicago 4.

John M. Otter, formerly sales manager of the Radio division of the **Philco Corporation,** has been promoted to general sales manager of the firm.

William Sellers & Co., has announced its intentions of removing its Philadelphia, Pa., office to Rochester, N. Y., and of merging with the **Consolidated Machine Tool Company** of Rochester.

Charles E. Coyle, assistant general traffic manager of the **Otis Elevator Company,** has been appointed general traffic manager, to succeed **George W. Shannon,** who has retired after 41 years' service.

John T. Elwood, service representative of the **Vapor Car Heating Company,** at Chicago, has been appointed district engineer of the company's office at St. Louis, Mo.

R. E. Cryor, general manager of the asbestos division, **Union Asbestos & Rubber Co.,** with headquarters at Cicero, Ill., has been elected a vice-president and director of the company.

George Hohmann has been appointed Chicago district manager of the Electrode division of the **McKay Company,** with

George Hohmann

headquarters in that city. Mr. Hohmann joined the company in 1942 to help set up additional electrode manufacturing facilities at its McKees Rocks, Pa., plant.

Frederick G. Hughes, vice-president of the **General Motors Corporation** and general manager of its New Departure division at Bristol, Conn., has retired after 36 years association with the division. **Milton L. Gearing,** formerly plant manager for the division at Meriden, Conn., has been appointed general manager to succeed Mr. Hughes.

Ralph W. Engsberg, formerly assistant chief telephone engineer, has been appointed chief telephone engineer for the **Federal Telephone & Radio Corp.,** manufacturing associate of the International Telephone & Telegraph Corp., Clifton, N. J. **Mr. Engsberg** received a degree in electrical engineering from the University of Wisconsin. He has been associated with telephony for more than 30 years, and

Ralph W. Engsberg

served with the Automatic Electric Sales Corporation, the Automatic Electric Company and the Western Electric Company before joining Federal's telephone engineering department in 1945. While with this department, Mr. Engsberg assisted in the

THE BALTIMORE AND OHIO RAILROAD COMPANY

SUMMARY OF ANNUAL REPORT 1946

To All Security Holders:

In 1946 the operating revenues of the Company were $304,984,716, or $56,388,502 less than in 1945. Operating expenses were $275,212,290, or $21,449,257 less than in 1945; however, included in the 1945 figures was $18,571,715 representing balance of cost of war emergency facilities unamortized when the emergency period was terminated by Presidential Proclamation, September 29, 1945, which distorts the comparison. Taxes in 1946 show a net credit of $338,529, a decrease of $20,412,784. This is due entirely to a tax carry-back credit of $20,148,000 claimed by the Company under the provisions of the law which permits the carrying back of the 1946 operating loss and recomputation of income and excess profits taxes of prior years.
The revenues, expenses and net earnings for 1946 were:

REVENUES:

	Year 1946	Compared With 1945
From transportation of freight, passengers, mail, express, etc.	$304,984,716	D $56,388,502
From other sources — interest, dividends, rents, etc.	6,393,098	D 397,790
Total	$311,377,814	D $56,786,292

EXPENSES:

Payrolls, fuel, material, etc.	$275,212,290	D $21,449,257
Taxes Cr.	338,529	D 20,412,784
Equipment and Joint Facility Rents	4,599,152	D 3,385,823
	$279,472,913	D $45,247,864
All other — interest on debt, rents, etc.	27,343,972	D 197,956
Total	$306,816,885	D $45,445,820
Net Earnings	$ 4,560,929	D $11,340,472

As a result of legislation, known as the "Crosser Bill," enacted by the 79th Congress, payroll taxes, are considerably increased, effective January 1, 1947, and it is estimated that this increase will add to the Company's costs more than $4,000,000 annually. The increase in costs of the Company by reason of higher wages, added payroll taxes and higher advanced prices of fuel and material, compared with January 1, 1946, is estimated at $44,000,000 annually. To partially offset the additional costs, the railroads in April, 1946, made application to the Interstate Commerce Commission for an increase in freight rates averaging about 19%, to be effective on short notice and in advance of hearing and final disposition of the petition. This was not granted, but permission was given to restore, effective July 1, 1946, the emergency freight rates and other charges authorized March 2, 1942, which had been under suspension since July 1, 1944, with certain modest additions.

This interim increase approximated only 7%. Following further hearings, the Commission authorized a permanent increase in freight rates and charges, effective January 1, 1947, estimated to add about 17.7% to the freight revenues of the Company in 1947.

Over the last 15 years, the rate of return of the Company has averaged only 3.62%. In 1946, even with the tax carry-back credit of $20,148,000 included, the rate of return was only 2.85%; excluding the tax carry-back credit, the figure would be less than 1%. Money invested in other public utilities and general lines of business has been earning about 2½ times as much as that invested in railroads. Railroads need rates which will permit them to earn a return of not less than 6%. Such fair return will sustain railroad credit and attract the investments of the public in railroad securities which are necessary to modernize facilities and provide better service, all in the best interests of patrons, employees and investors alike.

The President and Directors acknowledge with appreciation the continued loyalty and assistance of stockholders, patrons, Governmental agencies, officers and employees.

R. B. WHITE, *President.*

[Advertisement]

preparation of a five year plan for the expansion of certain equipment in the Havana area of the Cuban Telephone Company, an I. T. & T. associate.

Roxalin Flexible Finishes, Inc. and the **Interchemical Corporation** have announced jointly that the former company's operations have been combined with the finishes division of Interchemical. The personnel of both firms remain the same.

Glen Hoover, district manager of the **American Rolling Mill Company,** at Cleveland, Ohio, has been assigned to the direction of certain accounts in Canadian territory. He will work out of the Buffalo (N. Y.) and New York offices. **Don H. Hogan,** formerly manager at Boston, Mass., has been advanced to manager of the Cleveland district.

V. R. Weiss, whose election as president of the **O. C. Duryea Corporation,** was reported in the *Railway Age* of March 8, was born on April 19, 1899, at Baltimore, Md., and was educated in the public schools of Boston, Mass., and Chicago. Mr. Weiss began his career as a clerk in the stores department of the General American Transportation Corporation at East Chicago, Ind., on January 5, 1920. In 1923 he was advanced to foreman of the firm's lumber yard there, and in November 1926, was promoted to general storekeeper. He became also purchasing agent in August, 1936, and in 1941 was transferred to the company's office at Chicago. Mr. Weiss was appointed general purchasing agent for General American and all its subsidiaries in 1944, the position he held at the time of his election as president of the O. C. Duryea Corporation.

V. R. Weiss

Thomas J. Mahoney, district engineer of the **Vapor Car Heating Company** at St. Louis, Mo., has been appointed acting manager, with the same headquarters, replacing **E. J. Bryant,** who has retired. The company also has announced the opening of a new office at Cleveland, Ohio, under the management of **H. E. Nichols,** formerly sales representative in the Chicago office.

C. John Phillips has resigned as electronic sales department manager of the **Corning Glass Works'** technical products division, to join the **Pittsburgh Plate Glass Company** at Pittsburgh, Pa., as manager of product development. It also has been announced that the Corning division's electronic sales and industrial sales departments will be merged, under the management of **William H. Tomb.**

Robert P. Nichols has been appointed assistant domestic sales manager of **R. G. Le Tourneau, Inc.,** Peoria, Ill. Joining Le Tourneau after serving in the armed forces, Mr. Nichols has served as field engineer in the installation department, and more recently, as sales supervisor in the

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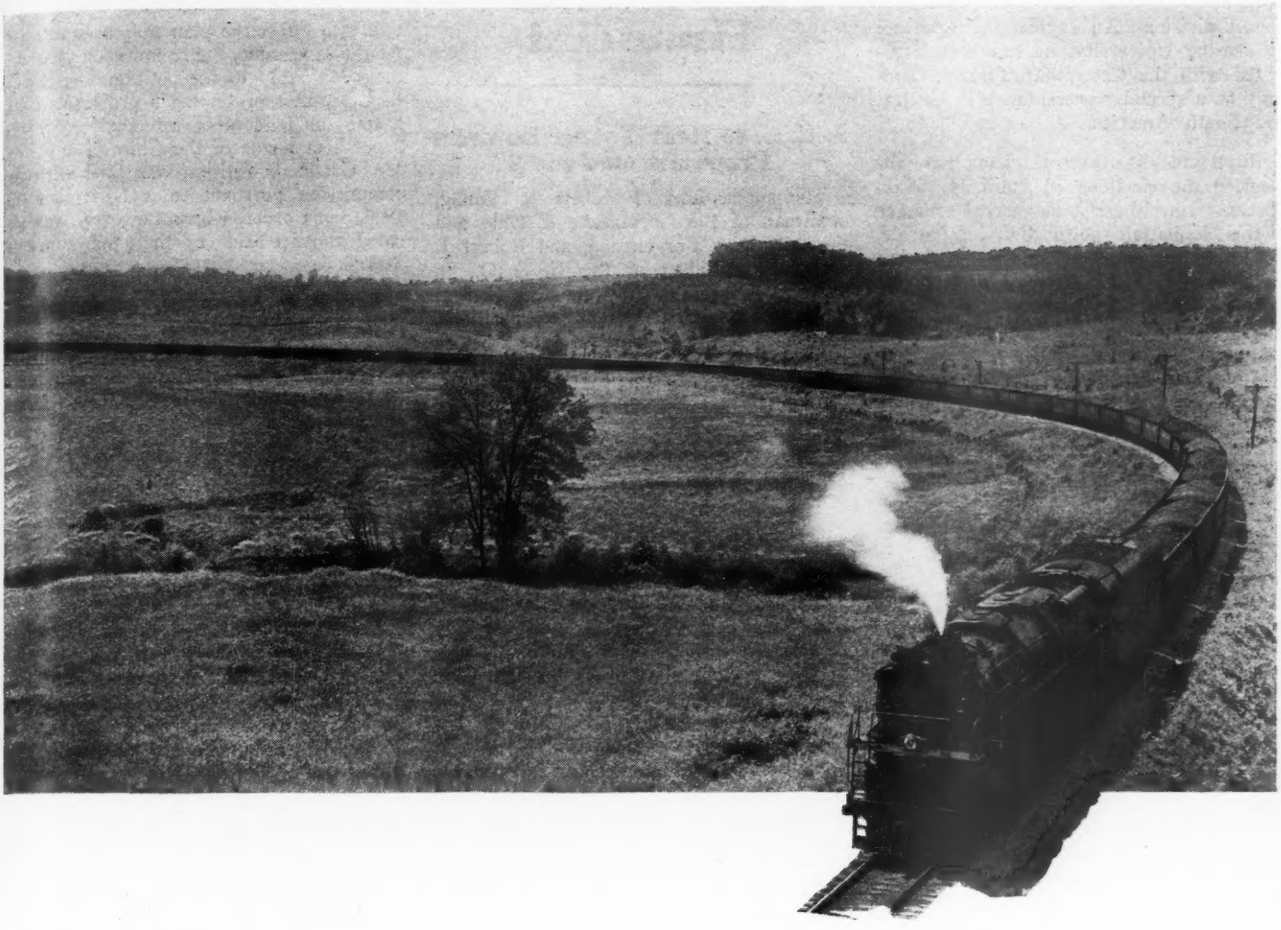

HIGH SPEED FREIGHT DEMANDS EMPHASIZE THE NEED FOR . .

MODERN POWER

Today's freight demands can only be met through a maximum of operating efficiency . . . operating efficiency that is backed up by MODERN Motive Power, capable of hauling increased loads at higher speeds. Reduced running time means increased availability . . . and increased availability means increased revenues. « Lima-built Modern Steam Locomotives have shown what Modern Steam Power can do to decrease running time and increase availability and freight revenues.

LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED **INCORPORATED, LIMA, OHIO**

export division. An engineering graduate of Purdue University, he has been associated with the Caterpillar Tractor Company as a special representative in Central and South America.

Raybestos-Manhattan, Inc. has announced the elections of **John H. Matthews,** formerly assistant general manager of the Manhattan rubber division, Passaic, N. J., as vice-president in charge of that division, and **O. H. Cilley,** formerly assistant general manager of the United States asbestos division, Manheim, Pa., as vice-president of that division. The election of **A. F. Heinsohn,** general manager of the general asbestos and rubber division, North Charleston, S. C., as a director of the company, also was announced.

OBITUARY

Joseph F. Farrell, who retired as vice-president of the Nathan Manufacturing Company in January, 1946, died on March 31. Mr. Farrell was born in Cleveland, Ohio, where he entered the service of the Michigan Central. He left that road in 1915 as purchasing agent, to join Nathan as general sales manager. In 1917 he was elected a director of the company and, in 1923, vice-president.

George A. Hull, a vice-president and director of Union Asbestos & Rubber Co., Chicago, died at Vista, Cal., on April 5. Earlier in his career, Mr. Hull was associated with the Great Northern for five years. Later he was appointed assistant mechanical engineer of the Chicago, Rock Island & Pacific. He joined Union Asbestos in 1923 and served as general manager of the equipment specialties division. He subsequently was transferred to the Los Angeles, Cal., area in May, 1945, where he did special work for the company in refrigerator cars and other railroad equipment.

Organizations

The annual banquet and entertainment of the **New England Railroad Club** will be held in the ballroom of the Hotel Statler, Boston, Mass., on May 8.

John W. Barriger, president of the Chicago, Indianapolis & Louisville, will address the **Maintenance of Way Club of Chicago** at its annual meeting and engineering night on April 28, at Hardings' Restaurant in the Fair store, on State street, Chicago. His subject will be "Modernizing the Monon."

On May 5, the **Traffic Club of Newark** (N. J.), in cooperation with the New Jersey Industrial Traffic League, the Traffic Club of Jersey City, the Traffic Club of Trenton, the Raritan Traffic Club, the Metropolitan Traffic Association of New York, and the Atlantic States Shippers Advisory Board, will hold a "Perfect Shipping Night" at the Robert Treat Hotel, Newark. Activities beginning at 6 p. m. will include a perfect shipping clinic, a motion picture showing, and six "minutemen" talks by representatives of shippers, railroads, and government agencies.

Financial

I. C. C. to Hear Young, Bowman Proposals on June 2

The applications of Robert R. Young, chairman of the Chesapeake & Ohio and the Alleghany Corporation, and Robert J. Bowman, president of the C. & O., to serve as directors of the New York Central while still retaining their present positions, have been set for hearing on June 2 before Assistant Director Bowles of the Interstate Commerce Commission's Bureau of Finance, at the Washington, D. C., offices of the commission. The applications are docketed as Finance Docket Nos. 11923 Sub 2 and 6281 Sub 6, respectively.

The hearing will also embrace the Finance Docket No. 14692 proceeding, in which C. & O. and Alleghany have asked the commission to modify its order of June 5, 1945, so that the C. & O.'s holdings in the New York, Chicago & St. Louis may be trusteed with the Chase National Bank of New York in place of its 409,000 shares of N. Y. C. stock (See *Railway Age* of April 12, page 759). The C. & O. has been required to deposit its N. Y. C. holdings with that bank as an independent voting trustee under the trusteeship created pursuant to the commission's same June, 1945, decision, in which it approved Alleghany's control of the C. & O., the Nickel Plate and the Pere Marquette.

The commission this week authorized the Virginian to intervene in the three proceedings. The Virginian's petition for leave to intervene said that its own interests as well as those of the public it serves would be adversely affected by any step which would tend to lessen the competition between the C. & O. and the N. Y. C. It also said that it now competes with the C. & O. with respect to a "substantial portion" of traffic interchanged by it with the N. Y. C.

ALTON. — *Reorganization Plan.* — This road's reorganization managers have asked the Interstate Commerce Commission for authority to consummate the approved plan for its reorganization, as confirmed last year by the federal court. They seek (1) authority to transfer the properties of the debtor, including leaseholds and stocks in the Joliet & Chicago, the Kansas City, St. Louis & Chicago and the Louisiana & Missouri River, to the Gulf, Mobile & Ohio; (2) authority for the trustees of the K. C. St. L. & C. and L. & M. R. to reconvey and said companies to acquire the respective properties; (3) authority for the K. C. St. L. & C., as reorganized, to issue certain securities as contemplated in the reorganization plan; and (4) approval of the acceptance by the Reconstruction Finance Corporation of securities and cash in discharge of all claims of the R. F. C. against the debtor pursuant to Section 5b(3) of the R. F. C. Act.

Acting upon a request of H. A. Gardner, trustee in the reorganization of the Alton road, Division 4 of the commission has dismissed his petition of November 13, 1946, for allowances with respect to certain expenses incurred in carrying out and putting into effect the plan of reorganization. At the same time, the commission also dismissed a reply to the petition filed by S. B. Gibbons, representing a protective committee for holders of refunding mortgage 3 per cent bonds of the Chicago & Alton. Mr. Gardner's petition was filed with the commission pursuant to a November 13, 1946, court order, which, however, was vacated and set aside by the same court on March 6.

BANGOR & AROOSTOOK. — *Annual Report.*—Operating revenues of this road last year amounted to $10,169,409, compared with $10,512,299. Operating expenses were $9,009,439, compared with $7,771,867. Fixed charges were $541,862, compared with $548,008. Net income was $453,811, compared with $747,104. Current assets at the end of the year were $4,031,478, compared with $3,936,565. Current liabilities were $2,394,383, compared with $2,251,630. Long term debt was $13,920,959, compared with $14,052,719.

BOSTON & MAINE. — *Annual Report.* — Operating revenues of this road in 1946 totaled $74,331,716, a decrease of $5,107,893 under the preceding year. Operating expenses were $64,126,323, a decrease of $6,248,441. Fixed charges were $3,787,970, a decrease of $196,908. Net income was $1,964,648, an increase of $1,211,719. Current assets at the end of the year were $26,365,236, compared with $32,494,925. Current liabilities were $14,727,050, compared with $17,747,668. Long term debt was $106,180,120, compared with $105,152,365.

CENTRAL OF GEORGIA.—*Vote on Reorganization Plan.* — The Interstate Commerce Commission, Division 4, has certified the results of voting on this road's reorganization plan, which the commission had submitted, for acceptance or rejection, to 15 classes of creditors and three leased lines. The certification shows that the second preference income bonds were voted 100 per cent to reject the plan, and that holders of first preference income bonds and third preference income bonds were in opposition to the extent of 95.95 per cent and 85.71 per cent respectively. Among other votes in the "rejected" column were 50.93 per cent of the consolidated mortgage 5 per cent gold bonds, 47.18 per cent of the first mortgage Macon & Northern division 5 per cent gold bonds, and 38.06 per cent of the first mortgage 5 per cent gold bonds. As noted in the *Railway Age* of March 22, page 636, Robert R. Young, chairman of the Alleghany Corporation, had announced that the Alleghany holdings would be voted against the plan.

CENTRAL OF NEW JERSEY.—*Reorganization Plan Suggested.*—A plan for the reorganization of this road, which has been in bankruptcy since October, 1939, has been filed with the federal court at Newark, N. J., and the Interstate Commerce Commission by three bondholder groups known as the institutional group, comprising savings banks and insurance companies, and the Watters and the Brooks committees. Under the proposed plan, three separate companies would be created. A Pennsylvania company would own and operate the road's Pennsylvania properties and a New

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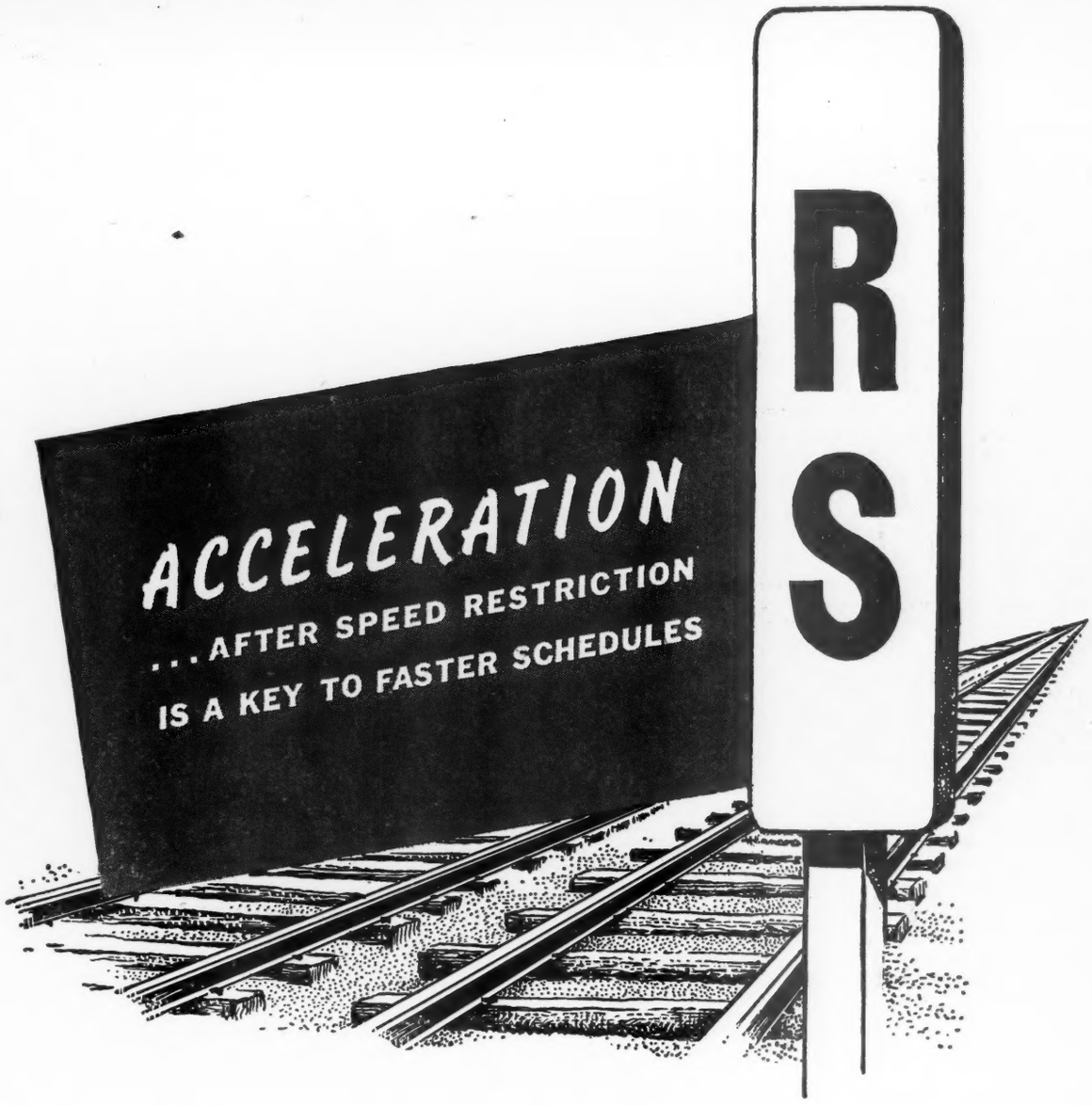

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Jersey company would function similarly for the properties in that state. A third (non-operating) company would own the stocks and certain bonds of the two operating subsidiaries. The plan makes no provision for the participation of the Reading or other existing stockholders.

CANADIAN NATIONAL.— *Annual Report.*—Operating revenues of this road last year amounted to $400,586,025, compared with $433,773,393 in 1945. Operating expenses were $357,236,718, compared with $355,294,048. The net deficit was $8,961,570, compared with a net income of $24,756,130. Current assets at the end of the year were $119,275,895, compared with $125,690,602. Current liabilities were $73,578,454, compared with $56,816,723. Long term debt was $530,422,997, compared with $573,179,997.

CHESAPEAKE & OHIO.—*Equipment Trust Certificates.*—This road has sold, subject to Interstate Commerce Commission approval, $1,650,000 of serial equipment trust certificates of 1947 to Halsey, Stuart & Co. and associates on a bid of 99.219 for 1½ per cent obligations. The bid represented a net interest cost to the C. & O. of about 1.648 per cent. The certificates were reoffered to the public at prices yielding from 1 per cent to 1.75 per cent, according to maturity. (See the *Railway Age* for April 5, page 721.)

CHICAGO, ROCK ISLAND & PACIFIC.—*Equipment Trust Certificates.*—Acting upon a request of the applicant, Division 4 of the Interstate Commerce Commission has dismissed the application whereby this road had sought authorization to assume liability for $5,850,000 of series V equipment trust certificates. The applicant said that it has decided not to acquire certain equipment, payment of which was to be partially financed by the certificates. (See *Railway Age*, February 15, page 384.)

CHICAGO GREAT WESTERN.—*Annual Report.*—Operating revenues of this road last year totaled $27,105,784, compared with $29,415,459 in 1945. Operating expenses were $23,093,675, compared with $22,127,297. Fixed charges were $816,151, compared with $768,883. Net income amounted to $173,487, compared with $799,609. Current assets at the end of the year were $11,669,643, compared with $13,785,874. Current liabilities were $5,256,267, compared with $7,112,404. Long term debt was $22,058,230, compared with $22,835,276.

DELAWARE & HUDSON. — *Annual Report.*—Operating revenues of this road last year amounted to $85,916,615, compared with $79,327,249 in 1945. Operating expenses were $70,550,548, compared with $69,954,306. Fixed charges were $2,913,270, compared with $3,453,864. Net income was $4,441,119, compared with $532,510. Current assets at the end of the year were $25,056,615, compared with $30,715,432. Current liabilities were $9,654,284, compared with $9,100,531. Long term debt was $67,267,264, compared with $77,135,184.

DENVER & RIO GRANDE WESTERN.—*New Directors and Trustees.*—John Evans, president of the First National Bank of Denver, at Denver, Colo., was elected chairman of the board of directors (announced in the *Railway Age* of April 19, and reported in more detail elsewhere in this issue on April 11). Also elected to the board were: Wilson McCarthy, president, and Edward A. West, vice-president and general manager, D. & R. G. W., at Denver; Henry Swan, vice-president, United States National Bank, Denver, and formerly a D. & R. G. W. trustee; Orval W. Adams, vice-president, Utah State National Bank, Salt Lake City, Utah; E. G. Bennett, director, First Security Corporation, Ogden, Utah; D. D. Moffat, vice-president, Kennecott Copper Corporation, Salt Lake City; James E. Ellison, vice-president and general manager, Layton Sugar Company, Layton, Utah; Merrill E. Shoup, president, Golden Cycle Corporation and vice-president, Holly Sugar Company, Colorado Springs, Colo.; John W. Morey, president, Morey Mercantile Company, Denver; W. C. Kurtz, president, Independent Lumber Company, Grand Junction, Colo.; John E. Gross, regional director, United States Employment Service, Denver; Henry McAllister, lawyer, Denver; Harvey J. Gunderson, director, Reconstruction Finance Corporation, Vermillion, S. D.; Maple T. Harl, chairman, Federal Deposit Insurance Corporation, Denver and Washington, D. C.; Ralph J. Wann, president, Wann Motor Car Company, Canon City, Colo.; Floyd G. Blair, vice-president, National City Bank, New York. The road's escrow trustees are: Mr. Evans, chairman; Mr. Wann and Mr. Gunderson; John F. Fitzpatrick, secretary-treasurer, Kearns Corporation, Salt Lake City; and Charles L. Tutt, president, El Pomar Investment Company, Colorado Springs.

INDIANAPOLIS UNION.—*Annual Report.*—Operating revenues of this road in 1946 totaled $530,224, an increase of $65,840 over the preceding year. Operating expenses amounted to $2,463,069, a decrease of $364,285. Fixed charges were $312,463, a decrease of $5,878. Net income was $454,849, a decrease of $74,384.

MINNEAPOLIS & ST. LOUIS.—*Annual Report.*—Operating revenues of this road last year totaled $14,570,115, compared with $15,573,062 in 1945. Operating expenses were $12,739,026, compared with $13,746,524. Net income was $439,288, compared with $574,040. Current assets at the end of the year were $4,490,513, compared with $5,465,056. Current liabilities were $2,676,404, compared with $2,800,563. Long term debt was $3,929,897, compared with $3,959,299.

MISSISSIPPI EXPORT. — *Notes.* — Acting upon a request of the applicant, Division 4 of the Interstate Commerce Commission has dismissed, without prejudice, the application whereby this road had sought authority to issue $30,000 in promissory notes. (See *Railway Age*, January 11, page 164.)

NEW YORK, CHICAGO & ST. LOUIS-CHESAPEAKE & OHIO.—*W. & L. E. Stock.*—The Interstate Commerce Commission has set May 22 as the date for hearing on the joint application whereby these roads and the Alleghany Corporation are seeking approval of the Nickel Plate's proposed purchase of C. & O. and Alleghany holdings of Wheeling & Lake Erie prior lien and preferred stock (See *Railway Age* of April 19, page 823.) The hearing will be held at Washington, D. C., before Examiners Molster and Grutzik.

NORFOLK SOUTHERN.—*Annual Report.*—Operating revenues of this road last year amounted to $7,909,715, compared with $7,542,106 in 1945. Operating expenses were $6,915,884, compared with $6,133,296. Fixed charges were $315,417, compared with $275,215. The net deficit was $55,183, compared with a net income of $122,424. Current assets at the end of the year were $3,031,186, compared with $3,015,494. Current liabilities were $2,006,337, compared with $2,288,130. Long term debt was $10,399,300, compared with $10,801,600.

NORFOLK & WESTERN.—*Annual Report.*—Operating revenues of this road last year totaled $129,714,096, a decrease of $15,149,422 under the figure reported for 1945. Operating expenses were $92,333,968, a decrease of $6,590,484. Net income was $23,727,675, an increase of $193,995. Current assets at the end of the year were $81,884,587, a decrease of $21,683,460. Current liabilities were $41,109,733, a decrease of $10,330,456. Long term debt was $49,783,131, a decrease of $755,200.

TENNESSEE CENTRAL. — *Bonds.* — This road has applied to the Interstate Commerce Commission for authority to issue $400,000 in first mortgage series A 4 per cent bonds, the proceeds of which would be applied toward reimbursing the applicant for expenditures between June, 1942, and December, 1946. The bonds, to be issued under a mortgage dated April 1, 1937, would be due April 1, 1967.

WABASH.—*Annual Report.*—Operating revenues of this road in 1946 amounted to $80,766,674, compared with $91,077,915 in the preceding year. Operating expenses were $65,570,599, compared with $65,544,874. Fixed charges were $2,191,158, compared with $2,382,550. Net income, after fixed charges and other deductions, was $3,674,288, compared with $5,504,434. Current assets at the end of the year were $38,854,771, compared with $47,851,575. Current liabilities were $22,606,218, compared with $32,134,511. Long term debt was $70,386,308, compared with $72,755,514.

WESTERN MARYLAND.—*Annual Report.*—Operating revenues of this road in 1946 totaled $32,070,791, compared with $34,169,276 in the preceding year. Operating expenses were $23,687,015, compared with $24,301,229. Net income was $2,029,196, compared with $4,239,833.

Average Prices Stocks and Bonds

	Apr. 22	Last week	Last year
Average price of 20 representative railway stocks..	45.63	44.36	63.69
Average price of 20 representative railway bonds..	89.44	88.99	101.83

Dividends Declared

Atlantic Coast Line.—Common, $1.00, payable June 12 to holders of record May 15.

Dallas Terminal.—Common, 35¢, quarterly; 7%

News Department continued on next left-hand page

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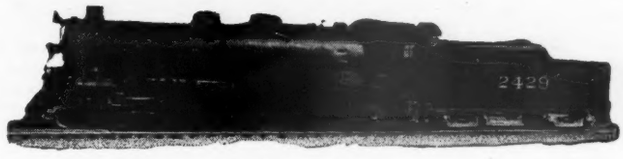

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preferred, $1.75, quarterly, both payable May 1 to holders of record April 18.

Rutland & Whitehall.—$1.05, quarterly, payable May 15 to holders of record May 1.

Abandonments

ATCHISON, TOPEKA & SANTA FE.—This road has applied to the Interstate Commerce Commission for authority to abandon a portion of its line from a point near Cottonwood Falls, Kan., to a point near Gladstone, 3.2 miles.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its line from a point near DeKalb, Ill., to Aurora, 24.8 miles, and to abandon operation, under a trackage rights agreement, over the Elgin, Joliet & Eastern from Aurora to a point near Joliet, approximately 22.5 miles.

GREEN BAY & WESTERN.—Division 4 of the Interstate Commerce Commission has vacated and set aside its order of February 28 in which it authorized this road to abandon a branch extending 9.7 miles from Scandinavia, Wis., to Waupaca, and has reopened the proceeding for hearing at a time and place to be designated later. (See *Railway Age*, March 15, page 576.)

LOUISVILLE & NASHVILLE.—This road has applied to the Interstate Commerce Commission for authority to abandon its so-called Long Branch spur, extending approximately 2.5 miles from Nevisdale, Ky., to Packard.

OREGON PACIFIC & EASTERN.—This road has applied to the Interstate Commerce Commission for authority to abandon an 8-mile line in Lane County, Ore.

PENNSYLVANIA-READING.—Division 4 of the Interstate Commerce Commission has authorized the Pennsylvania to abandon its so-called Shenandoah branch, extending 4.5 miles from Frackville Junction, Pa., to Shenandoah, and its so-called Gilberton Branch, extending approximately 0.8 miles from Gilberton Junction, Pa., to the end of the branch. At the same time, the commission also authorized the Reading to abandon operations under trackage rights over that portion of the Shenandoah branch from Frackville Junction to Boston Run Junction, 2.5 miles.

PETALUMA & SANTA ROSA.—This road has applied to the Interstate Commerce Commission for authority to abandon that portion of its line extending from Leddy, Cal., to Santa Rosa, approximately 2.6 miles.

TEXAS & NEW ORLEANS.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon approximately 5.2 miles of track, including sidings and spur tracks, in Dallas, Tex. In approving this transaction, the commission imposed the usual employee-protection conditions.

TEXAS & PACIFIC.—In connection with a relocation required by a federal government flood control project, Division 4 of the Interstate Commerce Commission has authorized this road to abandon that portion of its line extending from Melville, La., to Opelousas, 24.1 miles.

TEXAS & PACIFIC.—Acting upon a petition of the Railway Labor Executives Association and upon further consideration of the record, Division 4 of the Interstate Commerce Commission has extended from May 1 to June 1 its reservation of jurisdiction for the protection of employees who may be affected by this road's line abandonment authorized March 12, 1943, in the Finance Docket No. 13319 proceeding.

UNION ELECTRIC.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire line which extends from Parsons, Kan., to Nowata, Okla., 77 miles. Highway competition is given as the principal reason for the proposal, the application stating also that the line has so deteriorated that the outlay for necessary repairs would be beyond the means of the applicant.

UNION PACIFIC.—This road has asked the Interstate Commerce Commision for authority to withdraw its application in which it sought authority to abandon its line from Barnesville, Colo., to Briggsdale, 13.4 miles. The U. P. said that traffic has increased over the segment since September, 1946, when the abandonment application was filed.

Construction

Proposes Joint A. C. L.-F. E. C. Line into Disputed Area

In a proposed report in the Finance Docket Nos. 15335 and 15444 proceedings, in which the Atlantic Coast Line and the Florida East Coast, respectively, seek commission authority to construct separate lines to serve the general territory south of Lake Okeechobee, Fla., Examiner J. S. Prichard has recommended that Division 4 of the Interstate Commerce Commission authorize these roads to jointly construct, operate and maintain one line in lieu of the two proposed. At the same time, he recommended that unless the applicants agree to construct a joint line, the applications of both roads should be denied. The examiner's report asserted, among other things, that the construction of more than one line in the territory is unnecessary and would be an economic waste.

The A.C.L. on June 3, 1946, applied to the commission for authority to construct and operate an 18-mile branch line extending from a connection with its so-called Lake Harbor, Fla., branch at a point about 4 miles west of Lake Harbor to a point in the Everglades, about 8.5 miles directly south of that connection; thence easterly, about 7.5 miles, to the site of the mill operations of the Okeelanta Growers & Processors Cooperative; and thence easterly, about 2 miles beyond the mill, to a point on Highway No. 25.

In an application filed with commission on August 22, 1946, and amended on October 22, 1946, the F.E.C. sought commission approval to construct and operate a 12-mile branch line extending from a connection with its so-called Okeechobee branch at a point about 2 miles east of South Bay station to a point in the Everglades about 8 miles south of that connection, and thence westerly, about 4 miles, across Highway No. 25 to the mill.

According to the examiner's report, both lines would serve the Okeelanta mill and provide an outlet for agricultural products, which each road anticipates will be produced on newly developed land along its line. The report observed that the A.C.L.'s proposed line resembles the letter "L" and "that of the East Coast resembles the same letter, reversed, converging on the site of the . . . mill from the east and the west, respectively."

If a joint line were built, "each of the applicants would then have an equal opportunity to acquire the prospective traffic and neither would be wholly excluded from the territory," he continued. "In the absence of any definite evidence as to the most desirable location for a joint line, which is a matter for the applicants to decide, it is suggested that it be built in a course following directly south from a point where the applicants' existing lines meet at Lake Harbor, to the east-west right-of-way extending easterly to Highway No. 25, a total distance of approximately 15 miles." In this connection, he noted that the A.C.L. originally intended to build from Lake Harbor in a general southwesterly direction, along the bank of the Miami canal, but finally adopted the route now proposed.

The report also commented that the Seaboard Air Line, the Southern, and the Greater Miami Traffic Association intervened in support of the F.E.C. proposal and in opposition to the A.C.L.. These carriers, it was explained, favored the F.E.C. construction because all the new business would then have to be interchanged at Jacksonville, thus affording an opportunity for all connecting carriers, including the A.C.L., to participate in the movement of such business beyond Jacksonville. "Although the Seaboard and the Southern seem to be greatly dissatisfied that the Atlantic Coast is in a position to take advantage of the long haul on its traffic," the report noted, "the testimony of their witnesses is to the effect that they would be inclined to take the same advantage under similar circumstances."

U. P. to Build 6,700-ft. Tunnel at Cost of $8 Million

Construction of a 6,700-ft. railroad tunnel, at an estimated cost of $8,000,000, will begin within 30 days on the Union Pacific between Altamont, Wyo., and Aspen, G. F. Ashby, president of the railroad, announced this week. The project, to be completed within two years, will eliminate the only stretch of single track on the line between Omaha, Neb., and Salt Lake City, Utah.

Mr. Asby said the present 5,941-ft. Aspen tunnel will carry eastbound traffic and the new tunnel westbound traffic, thereby eliminating a single-track bottleneck, expediting traffic and increasing safety of

News Department continued on next left-hand page

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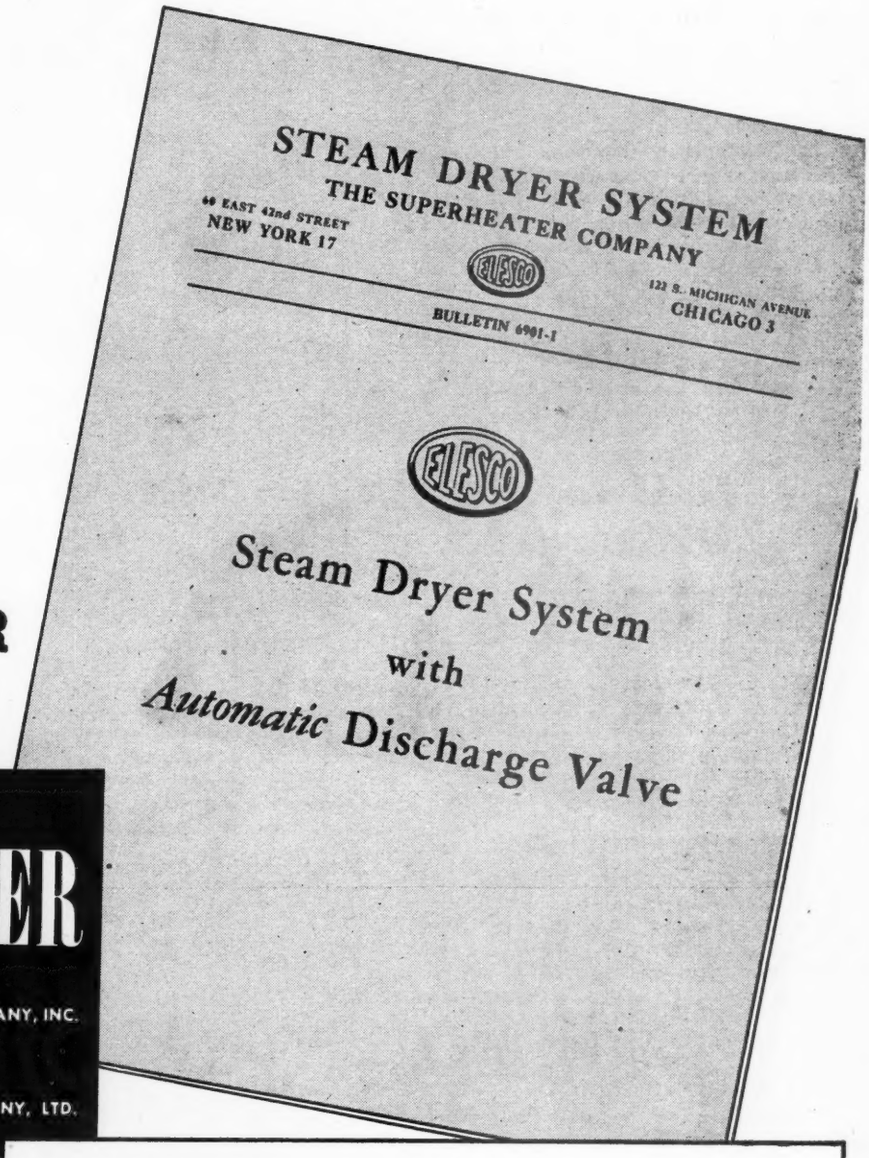

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operations. The tunnel will be built parallel to and one-fourth mile north of the old one, which was completed in 1901.

The project will cut through a 7,660-ft. spur of the Uintah mountains at an elevation of 7,200 ft. and at an 0.4 per cent grade ascending westward. It will be the longest tunnel on the U. P., with an overhead clearance of 24 ft. over the top of the rail and with a maximum width of 18½ ft. The tunnel will be lined with reinforced concrete and steel and will have elaborate drainage facilities and electric lighting throughout, Mr. Ashby said. W. C. Perkins, U. P. chief engineer, will direct the construction.

TEXAS & PACIFIC.—In connection with a relocation required by a federal flood control project, Division 4 of the Interstate Commerce Commission has authorized this road to construct and operate a line extending approximately 15.1 miles from Ville Platte, La., to Opelousas. The construction will cost approximately $1,074,000, of which $755,000 will be contributed by the government. The commission said that the construction must be completed by September 1, 1948.

Railway Officers

EXECUTIVE

Seth H. Moseley, II, whose appointment as assistant to the president of the St. Louis-San Francisco, in charge of public relations, publicity and advertising, was reported in the *Railway Age* of March 29, was born in New Haven, Conn. Mr. Mose-

Seth H. Moseley II

ley is a graduate of Amherst College, and was formerly director of public relations conferences for the National Association of Manufacturers. He has served as a reporter on the Springfield (Mass.) Republican and the New York Journal, and as a columnist, promotion man and night news editor in the New York bureau of the Associated Press.

S. R. Young, assistant general manager of the Altanta & West Point and the Western Railway of Alabama, has been elected president and general manager, with headquarters as before at Atlanta, Ga., succeeding **Charles A. Wickersham,** who has voluntarily retired after 47 years of service. Mr. Young, who was also assistant general manager of the Georgia, succeeds Mr. Wickersham as general manager of that road.

FINANCIAL, LEGAL AND ACCOUNTING

Warren Newcome, whose promotion to assistant general counsel of the Chicago & North Western, at Chicago, was reported in the *Railway Age* of April 12, joined the Chicago, St. Paul, Minneapolis and Omaha (part of the C. & N. W. system) in 1929

Warren Newcome

as general attorney, and as assistant Minnesota attorney for the North Western. In 1933 he was advanced to Minnesota attorney for the C. & N. W., and in 1942 was promoted to assistant general solicitor. Mr. Newcome was serving in the latter capacity at the time of his new promotion.

Lowell Hastings, whose promotion to general solicitor of the Chicago & North Western, at Chicago, was reported in the *Railway Age* of April 12, was born on August 1, 1902, at Indianapolis, Ind. He was graduated from Northwestern Uni-

Lowell Hastings

versity in 1925 and from the N. U. School of Law in 1928. Following his graduation, Mr. Hastings engaged in private practice in Washington, D. C., and Chicago. In 1931 he was appointed general attorney for the C. & N. W., which position he held until 1942, when he was advanced to assistant general counsel. He was serving in the latter capacity at the time of his new promotion.

Fred L. Johnson has been appointed assistant general claim agent of the Alton, with headquarters at Chicago.

OPERATING

J. S. Gray, trainmaster of the Chesapeake & Ohio, has been appointed assistant superintendent, with headquarters at Newport News, Va. **J. C. Gray,** general foreman coal piers, has been appointed assistant superintendent-coal piers, with headquarters at Newport News. **J. C. Baker, Jr.,** general foreman merchandise piers, has been appointed assistant superintendent—merchandise piers, at Newport News.

John P. Polk, whose retirement as superintendent of terminals of the Louisville & Nashville and the Nashville, Chattanooga & St. Louis, at Nashville, Tenn., was reported in the *Railway Age* of April 12, was born on September 26, 1875, at Elizabethtown, Ky. He entered railway service with the L. & N. in 1891, serving successively as office boy, telegraph operator, train dispatcher, chief train dispatcher, assistant trainmaster and trainmaster. In 1932 he was advanced to assistant superintendent of the Nashville terminals, and in 1936 was appointed assistant director of personnel at Louisville, Ky. Mr. Polk had been superintendent of terminals at Nashville since May 16, 1939.

L. T. Andrews, whose appointment as general superintendent transportation of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of April

L. T. Andrews

5, was born at Thomasville, Ga., on January 5, 1908. Mr. Andrews entered the service of the Atlantic Coast Line on May 26, 1925, as agency clerk at Boston, Ga., serving in various clerical positions in Georgia until December, 1935, when he went to the office of the superintendent transportation at Jacksonville, Fla. He was appointed transportation assistant at Wilmington on July 21, 1941. Mr. Andrews was furloughed to the Association of American Railroads in June, 1943, and assigned to traffic control, War Department, Wash-

News Department continued on next left-hand page

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WILMERDING, PA.

ington, D. C., returning to the Atlantic Coast Line on October 1, 1944. He was appointed acting trainmaster of the Richmond district in February, 1945, and became assistant to general superintendent transportation on February 11, 1947.

Fred J. Orner, whose appointment as general superintendent of transportation of the New York, New Haven & Hartford at New Haven, Conn., was reported in the

Fred J. Orner

Railway Age of April 19, was born at Newark, N. J., on November 20, 1911. Mr. Orner received his A.B. degree from Dartmouth College in 1932 and his M.B.A. from Harvard School of Business Administration in 1934. After service in the traffic department of S. H. Kress & Co., Mr. Orner entered railroad service in November, 1935, as a clerk with the New Haven. In November, 1941, he was appointed merchandise supervisor and two years later he became chief of the merchandise bureau. In November, 1944, he was appointed superintendent freight transportation, the position he held at the time of his recent promotion to general superintendent of transportation.

Edward B. Stanton, whose appointment as vice-president and general manager of the Spokane, Portland & Seattle, at Portland, Ore., was reported in the *Railway Age*

Edward B. Stanton

of April 5, was born at San Luis Obispo, Cal. He received his early schooling at Portland, Ore., finishing his education at St. Mary's College, St. Mary's, Cal. Mr. Stanton entered railway service in construction work with the Southern Pacific in 1922. From 1924 to 1927 he was engaged in private construction work, and in the latter year he joined the Northern Pacific's engineering and operating department in the western territory. In 1935 he was transferred to the Camas Prairie (controlled jointly by the Northern Pacific and Union Pacific), at Lewiston, Idaho. Returning to the N. P. in 1939, he served successively as roadmaster, trainmaster and in the engineering department on the Spokane (Wash.) division. He became associated with the S. P. & S. (owned jointly by the Great Northern and N. P.) in 1943 as engineer maintenance of way, and in October, 1946, was appointed assistant general manager. Mr. Stanton held the latter position at the time of his new appointment.

TRAFFIC

W. D. Buchanan, whose promotion to general passenger agent of the Canadian Pacific, at Vancouver, B. C., was reported in the *Railway Age* of April 19, was born at Moncton, N. B., in 1894, and entered the service of the C. P. in 1914 as a clerk at Winnipeg, Man. From 1917 to 1927 he served successively as traveling passenger agent and city ticket agent at Regina,

W. D. Buchanan

Sask. He was later transferred to Los Angeles, Cal., and in 1938 was appointed assistant general agent at New York. He was promoted in 1940 to assistant general passenger agent at Vancouver, which position he held at the time of his new appointment.

Henry J. Carr has been appointed general freight agent of the Missouri-Kansas-Texas, at St. Louis, Mo., a newly-created position. The position of assistant general freight agent is abolished.

J. R. Harper has been appointed general agent of the Chesapeake & Ohio and the Pere Marquette at Toledo, Ohio. **J. E. Black** has been appointed division freight agent there.

Thomas P. Totushek, traffic agent of the Chicago Great Western, at Houston, Tex., has been appointed general agent, with headquarters at New Orleans, La., a newly-created position. **Harley C. Shirer,** traffic agent at Des Moines, Iowa, has been appointed general agent, with the same headquarters, a newly-created position.

W. M. Carey, freight traffic manager of the Denver & Rio Grande Western at Denver, Colo., has been promoted to general freight traffic manager there. Mr. Carey is succeeded by **F. J. Toner.**

Norman C. Murray has been appointed general agent, freight department, of the New York Central system, with headquarters at Corning, N. Y., to succeed **W. H. Feinle,** who has been transferred to Philadelphia, Pa., succeeding **J. B. Dwyer,** deceased.

Leonard J. Knowles, commission traffic representative of the Canadian National at Montreal, Que., has been appointed freight traffic manager, with jurisdiction over all tariff, rate and division matters on the entire system, with headquarters at Montreal.

MECHANICAL

P. H. Smith, assistant to engineer of tests of the Chicago, Burlington & Quincy, has been promoted to engineer of tests, with headquarters as before at Aurora, Ill., succeeding **Frank Zeleny,** who has retired after over 48 years of continuous service.

Wilfred C. Bowra, whose promotion to general superintendent of motive power and car equipment of the Grand Trunk Western, at Battle Creek, Mich., was reported in the *Railway Age* of April 12, was born on October 8, 1910, at Stratford, Ont. Mr. Bowra entered railway service with the Canadian National in 1928, serving as machinist apprentice successively in his home town and at Toronto, Ont. He later held positions as mechanical inspector of the C. N.'s central region, at Toronto, and as locomotive foreman at Cochrane, Ont., Toronto and Montreal, Que. In June, 1943, he was appointed assistant superin-

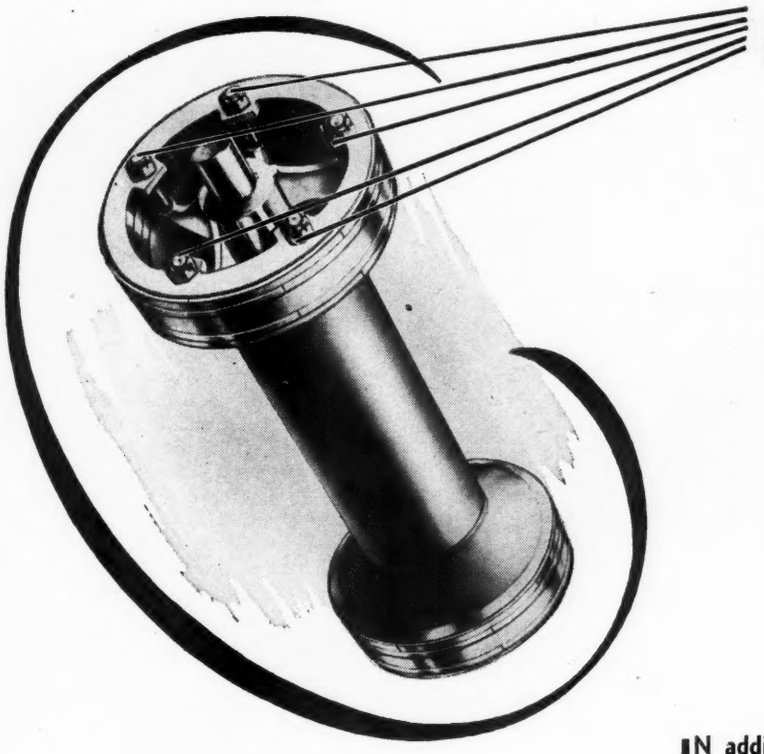
Wilfred C. Bowra

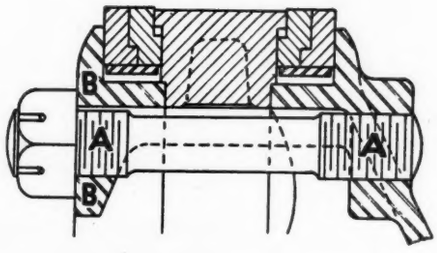
tendent of motive power and car equipment of the Montreal district, and in November of that year was advanced to superintendent of motive power and car equipment. Mr. Bowra held the latter position at the time of his new appointment.

News Department continued on next left-hand page

5 NUTS

Identify these better LIGHT WEIGHT VALVES





Cross section of valve packing and bull rings showing butt-welded stud bolt (A) and follower ring (B)

IN addition to having every recognized advantage of lighter reciprocating parts, Hunt-Spiller Light Weight Valves save time in the shop. When renewing packing rings you don't have to disassemble the valve or remove the stem. Ten nuts—five at each end—hold followers that secure packing and bull rings. Simply loosen these nuts and the replacement of either snap or sectional packing becomes any easy job instead of a formidable one.

Hunt-Spiller Light Weight Valves are in successful use on many roads, including New York Central, Great Northern, Akron, Canton and Youngstown, Union Pacific, Milwaukee, Boston and Maine, Soo Line, Lehigh and New England, Bessemer and Lake Erie, Texas and Pacific, and Lehigh and Hudson. Ask your Hunt-Spiller representative for full information. Hunt-Spiller Mfg. Corporation, 383 Dorchester Ave., Boston 27, Mass. In Canada: Joseph Robb & Co., Ltd., 4050 Namur St., Montreal, P.Q. Export Agents: International Ry. Supply Co., 30 Church St., New York 7, N. Y.

Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller *Air Furnace* Gun Iron.

HUNT-SPILLER

LIGHT WEIGHT
STEEL PISTONS AND VALVES
DUPLEX SECTIONAL PACKING
AIR FURNACE GUN IRON

ENGINEERING & SIGNALING

C. E. Gudgell has been appointed assistant engineer of the Missouri Pacific, with headquarters at Monroe, La., succeeding E. Haner, who has retired.

R. E. Caudle, principal assistant engineer of the Missouri Pacific, has been appointed assistant engineer structures, with headquarters at Houston, Tex.

W. O. Towson has been appointed principal assistant engineer of the Baltimore & Ohio, with headquarters at Baltimore, Md.

J. R. Cunningham, Jr., instrumentman of the Virginian, has been appointed assistant engineer, with headquarters at Roanoke, Va.

L. E. Bates has been appointed engineer maintenance of way of the Southern division of the Atlantic Coast Line at Jacksonville, Fla., as reported in the *Railway Age* of April 5. Mr. Bates entered the service of the Atlantic Coast Line as rodman in the construction department and

L. E. Bates

served in various other engineering positions until January 1, 1934, when he was promoted to junior engineer at Jacksonville. He went to Wilmington, N. C., as assistant engineer in 1937, and was advanced to division engineeer of the Southern division on December 1, 1943. Mr. Bates became roadmaster of the Wilmington district on February 1, 1946, which position he held at the time of his recent promotion to engineer maintenance of way.

T. P. Lynch, tie and timber agent of the New York Central, has been appointed assistant general purchasing agent, with headquarters at New York.

W. R. Bjorklund, division engineer of the Northern Pacific, at Glendive, Mont., has been appointed assistant district engineer, with headquarters at Billings, Mont.

L. W. Koenig, supervisor of labor camps of the New York Central, has been appointed assistant engineer, with headquarters at Detroit, Mich. **E. A. McLeod,** designer, has been appointed assistant engineer, with headquarters at Chicago.

M. W. Clark, whose appointment as principal assistant engineer of the Atlantic Coast Line at Wilmington, N. C., was reported in the *Railway Age* of April 5, was born at Savannah, Ga., on April 5, 1908, Mr. Clark was graduated from Citadel, Charleston, S. C., with the degree of bachelor of science in civil engineering and entered the service of the Atlantic Coast Line as chainman in the valuation depart-

M. W. Clark

ment at Wilmington on June 15, 1930. He was appointed rodman at Jacksonville, Fla., the following September 15, becoming junior draftsman at Wilmington three months later. On September 1, 1935, he became senior draftsman and on February 1, 1936, assistant supervisor building repairs at Rocky Mount, N. C. Mr. Clark was appointed junior engineer at Wilmington on February 1, 1937, and 14 months later he became assistant engineer at Savannah, Ga. On February 1, 1939, he was appointed office engineer at Savannah, becoming supervisor building repairs there on October 16, 1944. Five months later Mr. Clark went to Wilmington as office engineer, which position he held until his recent appointment as principal assistant engineer.

D. B. Packard, Jr., division engineer maintenance of way of the Atlantic Coast Line at Rocky Mount, N. C., has been appointed special assistant engineer, with headquarters at Wilmington, N. C.

G. A. Kellow, special water inspector of the Chicago, Milwaukee, St. Paul & Pacific, has been appointed assistant engineer, with headquarters at Chicago.

Raymond Westcott, assistant division engineer of the Reading, at Wyomissing, Pa., has been appointed division engineer, with headquarters at Reading, Pa.

G. F. Metzdorf, assistant chief draftsman of the New York, Chicago & St. Louis, has been appointed assistant designing engineer, with headquarters at Cleveland, Ohio.

W. L. Fisher, fire prevention engineer of the New York Central, at Cincinnati, Ohio, has been appointed timber treatment engineer, with headquarters at Indianapolis, Ind.

C. R. Gates, division engineer of the Southern, has been appointed assistant to chief engineer maintenance of way and structures, with headquarters at Atlanta, Ga. **W. H. Hoar,** assistant engineer bridges, at Cincinnati, Ohio, has been appointed assistant division engineer, with headquarters at Birmingham, Ala.

E. Q. Johnson, formerly supervisor bridges and buildings of the Ann Arbor, at Owosso, Mich., has been appointed assistant engineer of the Florida East Coast, with headquarters at St. Augustine, Fla.

H. W. Van Hovenberg, sanitary engineer of the St. Louis Southwestern, has been appointed engineer of tests and sanitation, with headquarters at Mt. Pleasant, Tex.

A. W. Johnson, assistant engineer of the Atchison, Topeka & Santa Fe, has been appointed engineer water service, with headquarters at Topeka, Kan. **C. E. Merriman,** assistant engineer, has been appointed construction engineer, with headquarters at Topeka.

OBITUARY

H. L. Needham, who retired on March 31, 1946, as master mechanic of the Illinois Central, at Chicago, died in that city on April 16.

Eugene E. Horton, vice-president and general counsel of the Peoria & Pekin Union, at Peoria, Ill., died suddenly in that city on April 22.

Karl Henry Suder, vice-president in charge of traffic of the Akron, Canton & Youngstown, with headquarters at Akron, Ohio, died at his home in Shaker Heights, Ohio, on April 14, at the age of 50 years. Mr. Suder was a native of Marietta, Ohio, and was graduated from Marietta College. He entered railroad service with the Pennsylvania, serving as telegraph operator and agent until 1925, when he went with the

Karl Henry Suder

Ohio & Pennsylvania Coal Co., of which he later became general sales manager. On December 16, 1936, Mr. Suder joined the Akron, Canton & Youngstown as purchasing agent, becoming general coal agent and purchasing agent on July 1, 1937; freight traffic manager in July, 1938 and general traffic manager in December, 1938. In January, 1940, he was appointed chief traffic officer and in February, 1944, he became vice-president in charge of traffic, the position he held until his death.

Current Publications

Pamphlets

Balancing the Timber Budget in the Bumper Belt. 32 pages, illustrated. Prepared by the Agricultural Development Department, Baltimore & Ohio, Baltimore, Md.

This is a manual which serves as a guide for the B. & O.'s program of system-wide forest conservation and reforestation in its territory. It discusses, among other subjects, the uses of wood and wood products, methods of conserving established woodlands and important points in reforesting operations.

The Course of Railway Labor Legislation, an Address by Daniel P. Loomis before the School of Banking, University of Wisconsin, July 30, 1946. 26 pages. Probably available from the Association of Western Railways, Room 482, Union Station Building, Chicago 6, Ill., or the Association of American Railroads, Transportation Building, Washington 6, D. C. Free.

Mr. Loomis discusses briefly, but in a very clear and readable fashion, the long history of legislation which has resulted in the formulation of the present Railway Labor Act and the manner in which that legislation has worked. He describes, in turn, the Act of 1888, the Erdman Act, the Newlands Act, the Adamson Act, the labor relations section of the Transportation Act of 1920, the Railway Labor Act of 1926, and the present Railway Labor Act. A resume of important wage cases since 1937 is given, and the increases granted under them, and the manner in which they were settled are described. This is a very handy pamphlet for anyone who needs a brief but complete digest of railway labor legislation.

The Maine Central Railroad, 1847-1947, by William A. Wheeler. 23 pages, illustrations. Published by the Maine Central Railroad Company, Portland, Me. Free.

Prepared in response to many requests from railroad enthusiasts and others interested in the history of railroads, this little booklet does not claim to be a comprehensive or complete history of the Maine Central, but the outline contains much of interest. The booklet opens with a chronology of the railroads which make up the Maine Central system. This is followed by brief descriptions of the railroads. Another chapter surveys the various lines of the railroad and the towns and cities served by it. Succeeding chapters relate interesting items of the road's history and describe the road as it is today.

British Railways Facts and Figures, compiled for the Great Western, London Midland & Scottish, London & North Eastern and Southern Railways and London Passenger Transport Board by the British Railways' Press Office, 2 Palace Chambers, Bridge street, Westminster, S. W. 1, London, England. 28 pages. Free.

This booklet gives railroad facts and figures in alphabetical order. In addition to statistics on earnings, traffic and equipment, it includes information on the amalgamation and government control of the railroads, world records held by them, a chronology of outstanding events, glossary of railway terms, and an Anglo-American glossary.

Books

Economic Research and the Development of Economic Science and Public Policy; Twelve Papers Presented at the Twenty-Fifth Anniversary Meeting of the National Bureau of Economic Research, June 6-7, 1946. 198 pages. Published by the National Bureau of Economic Research, Inc., 1819 Broadway, New York 23. Price $1.

This volume brings together the 12 addresses presented before the 25th Anniversary Meeting of the bureau, each bearing on some aspect of the general topic stated in its title. The papers range from a projection of economic science in the future, to a moving plea for scientific integrity, a reappraisal of British employment policy, and a review of current research in France.

The American Individual Enterprise System, Its Nature, Evolution and Future, by the Economic Principles Commission of the National Association of Manufacturers. Two volumes, 1119 pages. Published by the McGraw-Hill Book Company, Inc., 330 W. 42nd st., New York 18. Price $10.

This two-volume work is a description of the American economic system and how it functions, written by a group of business executives and economists. Volume 1 covers the individual enterprise system, employment, agriculture, money and credit, profit and loss, prices and transportation, while Volume 2 covers competition and monopoly, marketing, government regulation, public finance, business fluctuations, government spending and a program for America's future.

Articles in Periodicals

A Railroad Man Thinks Out Loud, by Roger E. Tornell. Harper's Magazine, February, 1947, pp. 130-140. Published by Harper & Bros., 49 E. 33rd st., New York 16. Single copies, 40 cents.

Mr. Tornell discusses the problem of what the railroads need to do to regain and hold their passenger business, particularly as it affects the Western roads, although, he says, the requirements for the entire country are much the same. He "thinks out loud" about the design of coach and sleeper equipment, improvements in local and through service, station modernization, personnel practices and fares. The article is illustrated with drawings by Gluyas Williams.

Train of the Tycoons, by Lucius Beebe. Holiday, May, page 47, et seq. Published by the Curtis Publishing Company, Independence square, Philadelphia 5, Pa. Single copies, 50 cents.

The luxurious appointments, the clientele and schedule of the New York Central's "Twentieth Century" are described, and many interesting anecdotes recounted, in this illustrated article.

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Plymetl

The material that's making news today

There are many reasons why Haskelite Plymetl has been specified for use in 80% of the new passenger cars now on order. Besides being sound deadening, easily fabricated and applied, its use drastically cuts deadweight. The chart below gives the strength and weight characteristics of Plymetl. It emphasizes the reasons why weight savings as high as 7600 pounds per car may be effected when Plymetl is used for partitions, bulkheads, pier panels, wainscoting and doors.

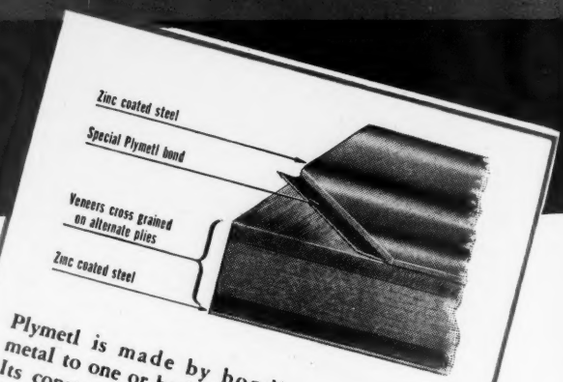
	PLYMETL UVU			STEEL U.S. STD. GAUGES			ALUMINUM B & S STD. GAUGES		
	1/4"	5/16"	3/8"	20 ga.	16 ga.	12 ga.	10 ga.	8 ga.	6 ga.
Weight in lbs. per sq. ft.	1.01	1.17	1.43	1.5	2.5	4.37	1.44	1.81	2.28
Stiffness factor E I in. ² lbs.	4,900	8,400	13,200	124	575	3,050	872	1,760	3,500

	PLYMETL EVE			STEEL U.S. STD. GAUGES			ALUMINUM B & S STD. GAUGES		
	1/4"	5/16"	3/8"	20 ga.	16 ga.	12 ga.	10 ga.	8 ga.	6 ga.
Weight in lbs. per sq. ft.	2.25	2.40	2.56	1.5	2.5	4.37	1.44	1.81	2.28
Stiffness factor E I in. ² lbs.	17,000	28,000	43,000	124	575	3,050	872	1,760	3,500

Where rigidity is of prime importance consider the following: A ⅜ in. UVU Plymetl panel (aluminum two sides) weighs 1.43 pounds per square foot. The weight of 20 gauge steel is 1.5 pounds per square foot. The Plymetl panel though lighter in weight has 100 times the stiffness of the sheet steel.

It is also true that a ⅜ in. Plymetl panel (UVU) has about the same stiffness factor as ¼ in. aluminum; yet the ¼ in. aluminum sheet is 2-½ times heavier than the ⅜ in. Plymetl panel.

In computing the values of Plymetl, the following is assumed: (1) The modulus of elasticity of steel, 30,000,000 lbs. per sq. in. (2) The modulus of elasticity of aluminum, 10,000,000 lbs. per sq. in. (3) The modulus of elasticity for the core material, 1,300,000 lbs. per sq. in. along the grain. 65,000 lbs. per sq. in. across the grain. (4) The thickness of steel and aluminum, .021" (27 ga.) and .015", respectively. (5) The weight of plywood plaque, 50 lbs. per cu. ft.



Plymetl is made by bonding thin sheets of metal to one or both faces of a plywood plaque. Its construction effects the most efficient distribution of these materials, combining high strength qualities of the metal surfaces with low density of woods. Result: Plymetl makes an ideal structural material, simulating an I beam with the metal surfaces taking the part of the flanges and the light weight plaque acting as the web.

Write for complete data and samples.

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